



**1991
ADVISORY
COUNCIL *on*
SOCIAL
SECURITY**

**Critical Issues in American
Health Care Delivery
and Financing
Policy**

December 1991
Washington, DC



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Critical Issues in American Health Care Delivery and Financing Policy

A Report of the
Advisory Council
on Social Security

December 1991
Washington, DC

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PREFACE

The 1991 Advisory Council on Social Security was appointed by Health and Human Services Secretary Louis Sullivan in June 1989 to review the status of the Social Security and Medicare trust funds, as well as to study a range of health care issues. The Council convened 14 meetings, and to assist in the Council's deliberations, substantive, scholarly investigations were undertaken on a broad range of health care issues. Issue analysis background materials were developed to brief the Council members for their meetings and were used as a starting point for debate.

Council members were consistently impressed with the quality and focus of these documents, as well as the timeliness of their analysis. In the process, the Council decided that this valuable information would be published for the American public and those with particular interest in health care policy and reform. This report contains 18 analytical papers which served as background briefing documents for Council discussion and formulation of recommendations. The papers represent a comprehensive look at health care issues as they appear at the point in time during which the Council conducted its work.

This report is divided into three parts: Access, Cost Containment, and Health Care Delivery in Other Countries. The Access section is further divided into three categories: Problems of Access to Care, Innovative Approaches to Expanding Access to Care, and Approaches for Financing Expansions in Access to Care.

The Council thanks Judith Arnold, Jessica Miller, and David Kennell, who had principal roles in this project. Other contributors include Lisa Alexih, Daniel

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EXECUTIVE SUMMARY

The focus of the 1991 Advisory Council on Social Security covered the waterfront in health care—the solvency of the Medicare Trust Funds; the adequacy of the Medicare and Medicaid programs; access to health care for the uninsured; long-term care; and an examination of the range and scope of the problem of rising health care costs and its implications for the economy and for individuals.

This Report contains 18 separate papers that served as background briefing documents to guide Council discussion on issues related to health care reform. These papers represent the most current research of the issues that are important in the 1990s in considering any redesign of our health care financing and delivery system. They are intended to provide a historical perspective as well as to provide guidance for future debates on health care policy.

The document contains papers covering three different areas—access to care, cost containment, and health care financing and delivery in other countries. Following is a listing of the papers and a short description of each.

Access to Care Papers

These papers describe the current health care financing and delivery system and the gaps in the system for persons who are uninsured and underinsured. The papers then present a range of incremental options that have been widely discussed for expanding access to care.

Profile of the Uninsured and Underinsured

Most estimates place the number of Americans lacking public or private health insurance coverage between 31 and 36 million. Many millions more have coverage which does not meet their health care needs. Fashioning proposals to address the needs of the uninsured and underinsured requires an understanding of the number and characteristics of these populations. This paper describes the size and characteristics of the uninsured and underinsured populations and examines the consequences of no insurance in terms of access to care and the cost of health care.

Private Health Insurance

For the great majority of Americans, private health insurance (both employment-based and self-purchased) is the primary source of financing for health care. Three-quarters of Americans younger than age 65 are covered by some form of private health insurance. Over two-thirds are covered by employer-sponsored plans. Approximately 14 million people younger than age 65 are covered by insurance bought by individuals. As policy-makers consider options for increasing access to health care for Americans currently without health insurance, it is important to understand the potential—and limitations—of the private market for health insurance as a mechanism for expanding coverage. This paper describes the growth and structure of private health insurance in the United States. It then presents the major issues confronting the private health insurance market and the implications for coverage.

Public Health Insurance

Through the creation of the Medicare and Medicaid programs, the Federal Government became a major payer for health services in the United States. Both Medicare and Medicaid were established to cover populations considered unable to obtain private health insurance to meet their needs. Since their enactment in 1965, these public programs have grown dramatically in size and scope, today providing coverage to about 58 million persons. The role of public insurance in meeting the Nation's health care needs has received renewed interest as the problems of access to care and rising health care costs have intensified. Questions are being raised about the potential for reforming to meet the needs of a broader population including the currently uninsured. This paper presents an overview of the Medicare and Medicaid programs, their limitations in providing health care coverage, and their role in health care reform.

The Role of Direct-Financed Services

Direct service providers play an important role in health care delivery in the United States, even though their budgets represented a small proportion of the over \$600 billion spent on personal health care expenditures in 1990. Many Americans receive a significant amount of health care from providers who are directly financed by Federal, State and local governments and private foundations to deliver health care to specific populations. Direct service providers are characterized as those who receive public and/or private monies to serve specific populations or who offer a defined set of services. These providers include government-owned and operated hospitals and clinics and not-for-profit health centers supported by grant funds. Specific targeted groups include military personnel, veterans, pregnant women, infants, children, the elderly, persons with disabilities, and minorities. Special

services include maternal and child health care, substance abuse and mental health services, and immunizations. This paper describes the major providers and sources of funding for direct services and examines the role of direct services in health care reform.

The Problem of Long-Term Care

Five major problems affect the United States' long-term care financing and delivery system. These problems include: the catastrophic costs of long-term care; the lack of public or private risk pooling; variation and lack of access; questionable quality of long-term care services; and high and increasing long-term care expenditures. This paper briefly discusses each of these problems as well as the factors that contribute to each problem and the consequences of each problem.

Health Insurance Reform for Small Employers and High-Risk Individuals

With about one-third of uninsured workers and their dependents employed by firms with fewer than 25 employees, widespread attention has focused on the small employer market for health insurance. Small employers may be denied health insurance or face higher premiums than larger groups for comparable coverage. This paper reviews the six major categories of health insurance reform proposals and their implications for coverage. The categories include small employer market reforms; private reinsurance; mandatory community rating risk pools for uninsurable individuals; affordable coverage for small employer groups; and tax assistance for small employers.

Medicaid Expansion

Many of the major health care reform proposals that call for universal coverage include a prominent role for Medicaid, typically as a complement to expanded employment-based insurance. At both the State and Federal levels, Medicaid expansions have been implemented as a means of improving access to care for vulnerable or at-risk groups, such as low-income pregnant women and young children. Expansion of Medicaid may occur along several dimensions: eligibility, services, and reimbursement. Although the impact of expansions in terms of improved access is not yet clear, it is evident that the cost implications for States have been high and increasingly burdensome. The difficulty with Medicaid expansion/reform is finding an acceptable balance between expanded access and cost. This paper describes proposals for Medicaid expansion and their potential impact in these two areas.

The Role of Schools in Expanding Access to Care

The significant relationship between health and school performance is well established. Educators and parents alike recognize that children who are healthy are more likely to attend school on a regular basis and function productively in the classroom. As a result, schools are becoming increasingly involved in developing comprehensive school health programs designed to promote healthy behaviors among school children. This paper discusses the role schools can play in expanding access to care and how these efforts might be financed.

State Initiatives to Expand Access to Care

Over a dozen universal health insurance proposals are being considered by State legislatures, and even more commissions and task forces have been

established to study the issue. Three States have enacted programs to achieve universal coverage, while a number of States have implemented incremental approaches targeted toward particular segments of the population. State fiscal crises have slowed implementation of these initiatives. Many States are now finding it difficult to meet their commitments to current programs and are reluctant to undertake new reform efforts. States do not believe they can expand access to care without first gaining control over spiraling health care costs. This paper describes the reform options that have been enacted or are being considered at the State level. It first discusses the universal reform proposals and then presents the targeted reform options which have been adopted.

Options for Financing Long-Term Care

The financing and delivery of long-term care services pose challenging public policy dilemmas. This paper presents a brief review of some of the major problems of long-term care, including catastrophic costs, the lack of risk pooling, variation and lack of access to services, questionable quality of some services, and high and increasing expenditures. It then presents a framework for assessing long-term care reform options. A number of public, private, and combined public/private options are then described. The public options discussed are Medicaid reform, comprehensive social insurance, front-end nursing home coverage, back-end nursing home coverage, and expanded home care. The private options described are Individual Medical Accounts, incentives for long-term care insurance purchase, accelerated death benefits, and use of pension funds. The combined public/private options are Medicaid Spenddown Insurance, voluntary Medicare insurance, and combined Medicare acute/long-term care coverage. The paper concludes by applying the framework to several of these reform initiatives.

Approaches for Financing Expansions in Access to Care

Many of these recent health care reform proposals for expanding access to care would involve increased Federal spending on health care. However, little attention has been paid to how these new programs (or extensions to existing programs) will be financed. This paper addresses eight different sources of financing: payroll taxes; personal income taxes; taxing some employer-provided health insurance benefits as income; a value-added tax (VAT); "sin" taxes, such as excise taxes on gasoline, alcohol, and tobacco; national lotteries; "user" taxes, so that those covered in a new program pay a disproportionate share of the program's costs; and estate and gift taxes. These eight alternatives have been considered in financing health care reform because they can be easily integrated into the existing tax system and because they raise substantial amounts of revenue. The paper begins with a discussion of the projected costs of some of the current health care initiatives. Understanding the size of these costs provides some context for considering the various revenue proposals. Next, a framework for analyzing the different financing approaches is presented, which considers (1) how much net revenue the alternative could raise; (2) how each alternative affects economic and personal incentives; and (3) issues of fairness and equity—will certain groups, particularly the poor, contribute a disproportionate share of these new revenues? The paper concludes with an analysis of each of the eight alternatives within the framework.

Cost-Containment Papers

With health care cost containment emerging as a national priority, these papers discuss the problem of rising health care costs, the experience of

efforts to contain costs, and the impact of cost containment on quality of care.

The Problem of Rising Health Care Costs

The rise in health care spending has become a serious and persistent national concern. Health spending between 1976 and 1990 increased by more than twice the rate of growth of the economy. Because this rate of growth has exceeded the rise in the Gross Domestic Product, the fraction of our resources devoted to health care spending also increases every year; it is currently projected to reach 17 percent of GNP by the year 2000. This rise in spending cannot be sustained indefinitely. Concern over this issue has resulted in calls from business, government, and consumers for limits on health care spending. However, many questions about controlling health spending remain unanswered. What composes the current level of health care spending? Why is spending rising so quickly? This paper addresses each of these questions.

Controlling the Costs of Administration

The costs of administering the U.S. health care system have been the subject of much recent debate. Many believe that administrative costs are excessive and that they contribute to rising health care costs and high rates of uninsurance. Administrative costs have become the target of those who believe that by reducing these costs, the United States can decrease significantly the amount spent on health care without further eroding access or adopting draconian cost-containment measures. At the center of the debate over administrative costs is the question of how much pluralism in the health care system we are willing to pay for. The costs of administering a health care system with multiple payers does cost more than a single-payer

system but no agreement has been reached on how much more. In addition, the full costs and benefits of pluralism compared with a single payer approach have not been adequately addressed in the debate over administrative costs. This paper examines the costs of administering the U.S. health care system and the role that administrative costs are playing in the health care reform debate.

Containing Health Care Costs Through Supply and Price Controls

Policymakers have renewed interest in developing cost-containment initiatives to slow the rise in health care costs. Prior efforts to curb rising health care costs have been sporadic and only marginally successful. Most attempts to control spending have focused on one payer (e.g., Medicare) or on certain providers (e.g., hospitals), and while they have been effective in certain parts of the health care system, they have been unsuccessful in slowing the rise in total health spending. The failure to control increases in total health spending may be explained by the two following factors. First, efforts that achieved some costs savings in one segment of the health care system usually resulted in cost shifting to other segments, producing total aggregate increases in overall health care spending. Second, efforts to control costs were often marked by an absence of "will" to make tough decisions regarding the control of services and technology. This paper examines the efforts to contain health care costs in the United States through supply and price controls, many of which have been established at the Federal and State level over the past 15 years. Specifically, the paper examines the experience and effectiveness in controlling costs; health planning and Certificate of Need; State rate-setting programs; the Medicare Prospective Payment System; and controls on expenditures.

Managed Care as a Cost-Containment Vehicle

Managed care is increasingly seen as a mechanism both for limiting prices paid to providers and for restraining excessive utilization of health services. While managed care has been advocated by some as a solution to the Nation's health cost problems for 20 years, it is only recently that managed care has garnered a wide constituency and has become a large, mature industry which touches a significant proportion of both the privately and publicly insured population. This paper describes the fundamental elements of managed care as a cost-containment vehicle. It begins by defining the concept of managed care and provides an overview of the principal managed-care strategies employed by purchasers of health care. It then follows with a more indepth description and analysis of the specific managed-care programs which comprise each primary strategy.

Health Care Rationing

Health care rationing has emerged as one of the most difficult and pressing social questions of our time. Interest in the potential to control spending through rationing of care has been prompted by the lack of success of efforts to control overall spending on health care. Recent interest has also been stimulated by the efforts of the State of Oregon to implement a program which would explicitly ration health services to those insured under Medicaid. There are essentially two methods by which health care resources can be allocated: price rationing and "non-price" rationing. In price rationing, already common in the United States, health care is rationed on the basis of price. This paper presents a number of studies which indicate that patients without an ability to pay receive less care than those who are well-insured. Non-price rationing, the focus of this paper, occurs when even those with an ability to pay for care are not allowed to do so. Although non-price

rationing has not been broadly applied in the United States, it appears to be a regular feature of health care systems in some industrialized nations. The paper begins with a discussion of the debate over whether health care rationing will be necessary. It goes on to discuss the many difficult and complex logistical, legal, and ethical problems associated with non-price rationing. The paper concludes by considering the likely future of health care rationing in this country.

Cost Containment and Quality of Care

General agreement exists that the United States spends too much on health care relative to consumer perceptions of value. It is also recognized that some of the care delivered is unnecessary or of low benefit. Many existing cost-containment strategies are intended to eliminate unnecessary and low benefit care while preserving care that is of value. The question posed by many policy-makers is the extent to which these approaches have successfully targeted waste and inefficiency or whether quality of care has been jeopardized. This paper examines the evidence of the impact on cost and quality of care of two strategies: (1) incentives to influence provider behaviors such as provider reimbursement incentives designed to influence providers to use fewer resources and (2) incentives to influence consumers such as increased patient cost-sharing. The paper begins by defining quality of care and discussing the approaches to measure quality. It goes on to discuss the relationship between cost and quality and concludes by reviewing the impact of provider payment incentives and consumer behavior incentives on the quality of care.

Health Care Financing and Delivery in Other Countries

The large number of uninsured persons and increasing health care expenditures in the United States have led policy-makers and consumers alike to examine the delivery systems of other countries, primarily because they provide universal care while spending less. This paper provides an overview of the health care delivery systems of four foreign countries and examines their approaches to containing health care costs while attempting to maintain access and quality of care. It also explores consumer perceptions of how well the various systems are working and what difficulties there may be in transferring aspects of foreign delivery systems into the United States. The countries profiled are Canada, the United Kingdom, Germany, and France.

Part One: Access

Problems of Access to Care



PROFILE OF THE UNINSURED AND UNDERINSURED

Most estimates place the number of Americans lacking public or private health insurance between 31 and 36 million. Many millions more have coverage which does not meet their health care needs. Fashioning proposals to address the needs of the uninsured and underinsured requires an understanding of the number and characteristics of these populations. Thus, this paper describes the size and characteristics of the uninsured and underinsured populations and examines the consequences of uninsurance in terms of access to care and the cost of health care.

The Uninsured

The uninsured are a diverse group of Americans. Most of the uninsured are employed. Many are children and the majority are low-income. This section discusses the estimates of the number of uninsured and describes their characteristics.

Estimates of the Number of Uninsured

The precise number of uninsured in the United States has been subject to considerable debate. Analysis of the March 1990 Current Population Survey (CPS)¹ found that 33.3 million Americans or 13.5 percent of the population

¹ The Current Population Survey (CPS) is an annual survey conducted by the Census Bureau on labor force characteristics and health insurance coverage.

had no private or public health insurance throughout all of 1989.² The 1987 National Medical Expenditure Survey (NMES) found that 47.8 million people (18.5 percent) lacked insurance for all or part of 1987, with between 34 and 36 million uninsured on any given day and 24.5 million (9.5 percent) uninsured throughout the year.³ Despite these differences in estimates, policymakers agree that a high number of Americans are uninsured.⁴

The number of uninsured increased substantially from 1980 to 1984, and has remained roughly constant since 1984. The number of uninsured was estimated in the CPS at 28.8 million throughout 1979 and 37.3 million throughout 1984, a 30-percent increase. Uninsured persons as a percentage of the total population increased from about 13.0 percent in 1980 to about 15.8 percent by 1984. From 1984 to 1986, however, the number of persons reported to be without coverage throughout the year remained roughly constant at about 37 million. Changes in the CPS questionnaire in 1988 that improve the accuracy of the estimates have resulted in a lowering of the estimate of the number of uninsured. Estimates of the 1988 CPS place the number of uninsured persons at 31.8 million in 1987; estimates of the 1990 CPS placed the number of uninsured at 33.3 million persons in 1989, an increase of 5 percent.

The increase in the percentage of the population lacking health insurance appears to have been associated with the economic recession of the early 1980s. The increase in unemployment from about 5.8 percent in 1979 to about 9.5 percent in 1983 and the resulting loss of employment-based

² Lewin/ICF analysis of the March 1990 *Current Population Survey*.

³ P.F. Short, A. Monheit, and K. Beauregard, *National Medical Expenditure Survey: A Profile of Uninsured Americans: Research Findings*. (Rockville, MD: National Center for Health Services Research, 1989).

⁴ The uninsured are persons who do not have private or public coverage (i.e., Medicare or Medicaid).

insurance is thought to be the primary reason for the increase in the number of uninsured by about 6.5 million persons during the 1979 through 1983 period.⁵

The number of uninsured persons did not decline, however, as the unemployment rates dropped during the recovery from the recession. Although the unemployment rate declined from about 9.5 percent in 1983 to about 6.9 percent in 1986, the number of persons reported to be without health insurance remained roughly constant during the 1984 through 1986 period.⁶ The reasons the number of uninsured has not declined despite the decline in unemployment are:

- The increase in employment has been largely concentrated among the service industries, where the percentage of employers offering health insurance is relatively low. For example, between 1980 and 1986, the average annual rate of increase in employment in service industries was 4.3 percent. Manufacturing, however, an industry in which employers are more likely to offer health insurance, reported an average annual rate of decline in employment of 1.1 percent.⁷
- There has been a decline in the population of persons below the Federal poverty level who are eligible for Medicaid. With recent expansions in eligibility for pregnant women and young children, uninsurance among these groups should decline.
- Changes in employer health plans requiring greater employee cost-sharing may have caused persons to refuse coverage for themselves and/or their dependents.

⁵ Lewin/ICF, *The Health Care Financing System and the Uninsured*, prepared for the Health Care Financing Administration, April 1990.

⁶ The CPS questionnaire was changed in 1988. Thus, estimates of the number of uninsured from 1987 to 1989 are not comparable to earlier estimates.

⁷ Lewin/ICF, *The Health Care Financing System and the Uninsured*, prepared for the Health Care Financing Administration, April 1990.

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- The tax advantages of coverage have declined as marginal tax rates have declined, especially for low-wage workers. As a result, some firms may not be providing coverage.

Characteristics of the Uninsured Population

The 33 million uninsured persons are a complex mix of (1) persons for whom health insurance is not available, (2) persons who cannot afford coverage that is available, (3) persons who have access to insurance and the financial resources to purchase it but choose not to take the coverage, and (4) persons who are eligible for public programs (e.g., Medicaid) but are not aware of these programs. Many low-wage workers and their dependents are without insurance because their employers do not offer it, they are ineligible for Medicaid, and/or they cannot afford non-group coverage.

However, the uninsured also include individuals with higher annual incomes who presumably could afford insurance. They may choose to remain uninsured and pay for care out of pocket, or they may be excluded from coverage due to pre-existing health conditions. Some of the uninsured are persons who are eligible for Medicaid but do not enroll because they lack information about the program.

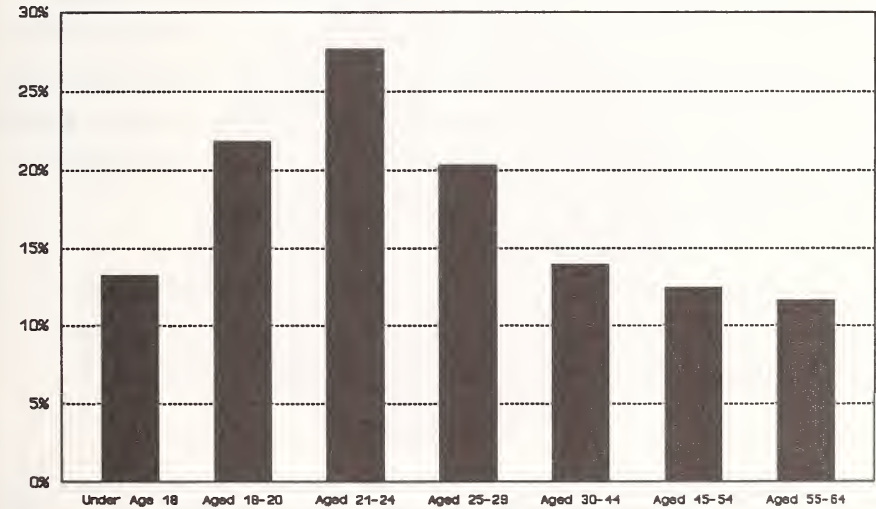
Individuals who are uninsured are on average younger than the general population, in lower income groups, and more likely to be unemployed or to report themselves to be in poorer health than the general population. The uninsured are also disproportionately Hispanic and nonwhite. However, because some of these segments of the population are small, most of the uninsured are adults, employed or dependents of employees, in good or excellent health, and white. In 1989, about 44 percent of the uninsured had family incomes over \$20,000 and 10.5 percent had incomes over \$50,000.⁸ Thus, in reviewing the characteristics of the uninsured, one must be careful

⁸ Lewin/ICF analysis of the March 1990 *Current Population Survey*.

to distinguish between the factors that increase the probability of not having insurance and the actual distribution of the uninsured among groups within the population.

Demographic Characteristics of the Uninsured. Of persons under age 65, those age 21-24 are the most likely to be uninsured, while those age 55-64 are the least likely to be uninsured (exhibit 1).⁹ Many of these young uninsured adults may be recent entrants to the workforce and may frequently change jobs, thereby interrupting coverage. They may also be employed by firms that do not offer health insurance. The finding that about 12 percent of persons age 55-64 are uninsured is of concern, since this group faces a much higher risk of serious health problems than do younger Americans.

EXHIBIT 1
PERCENTAGE UNINSURED AMONG THE NONELDERLY
POPULATION BY AGE



SOURCE: Lewin/ICF Analysis of the March 1990 Current Population Survey.

⁹ *Ibid.*

Over 8 million children (13.2 percent) were not covered by private health insurance and were either ineligible or did not receive publicly financed medical assistance in 1989.¹⁰ Approximately 75 percent of these children were in families with incomes below 200 percent of the Federal poverty level.¹¹ Almost 77 percent of uninsured children were living in a family whose head of household was also uninsured.

The employment status of the family head influences the insurance status of children: most uninsured children are in families whose family head is a full-time, full-year worker (56 percent). Children are more likely to be uninsured if their family head is either self-employed (22 percent) or working in a firm with fewer than 25 employees (30 percent). In families whose head of household is unemployed, 19 percent of children are uninsured.¹²

Men are slightly more likely to be uninsured than women, with about 17 percent of nonelderly men uninsured compared with about 14 percent of non-elderly women.¹³ Uninsured men also are younger on average than uninsured women. The lower rate of uninsurance among women may be attributable to Medicaid, which is targeted toward women with dependent children. Women are generally less likely than men to be covered directly by an employer health insurance plan but are more likely to receive employer coverage as dependents of other workers and publicly financed coverage.

Rates of insurance coverage vary by race and ethnicity. Among the uninsured, 57.5 percent are non-Hispanic white, 17.2 percent are non-Hispanic black, and 20.8 percent are of Hispanic origin (exhibit 2).¹⁴

¹⁰ *Ibid.*

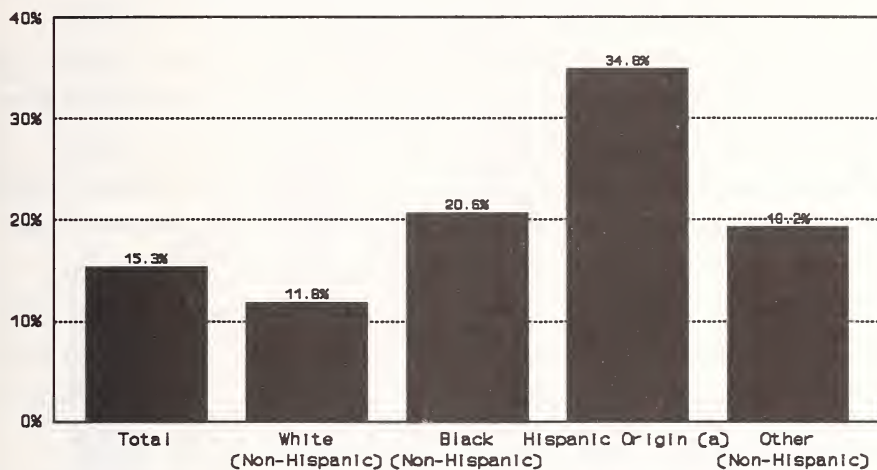
¹¹ The Federal poverty level for a family of three in 1989 was \$10,060.

¹² Employee Benefits Research Institute, *Uninsured in the United States: The Nonelderly Population without Health Insurance*, Washington, DC, April 1991.

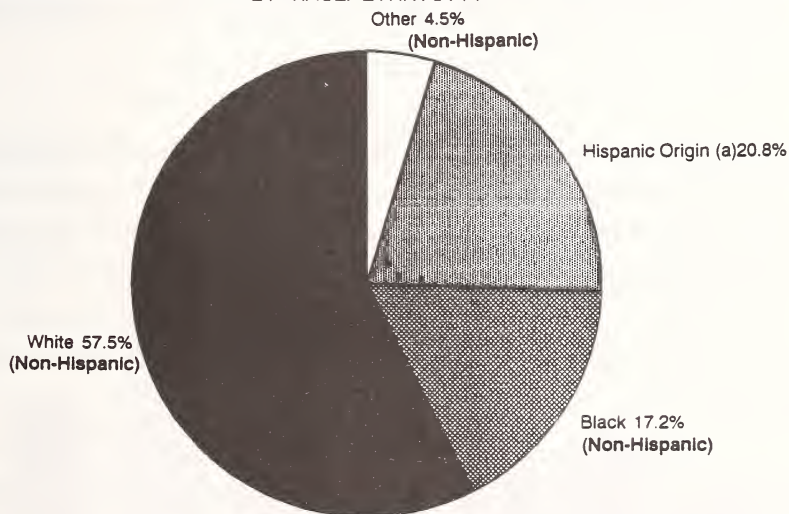
¹³ Lewin/ICF analysis of the March 1990 *Current Population Survey*.

¹⁴ *Ibid.*

EXHIBIT 2
PERCENT OF NONELDERLY POPULATION WITHOUT
HEALTH INSURANCE, BY RACE/ETHNICITY



NONELDERLY POPULATION WITHOUT HEALTH INSURANCE,
BY RACE/ETHNICITY



(a) Persons of Hispanic origin may be of any race.

SOURCE: Lewin/ICF Analysis of the March 1990 Current Population Survey.

However, individuals of Hispanic origin are more likely to be uninsured (34.8 percent) than either white (11.8 percent) or black (20.6 percent) individuals. More than 54 percent of the Hispanic population report income of less than 200 percent of the Federal poverty level compared with 28 percent of other groups. However, even at high income levels, Hispanics are more likely to be uninsured than all other groups. They are less likely to be covered by either private or publicly financed health insurance programs. At low-income levels, blacks are more likely to receive publicly financed health insurance than are other racial or ethnic groups, but at higher income levels they are less likely to receive employer coverage than are other groups.

Income Characteristics of the Uninsured. Most of the uninsured are low-income. In 1989, about 56 percent of the uninsured were in families with annual incomes under \$20,000.¹⁵ The likelihood of being uninsured is greatest for low-income families and declines as income increases. Thus, while more than 35 percent of families with incomes of less than \$5,000 are uninsured, only 9.3 percent of families with incomes above \$20,000 are uninsured.

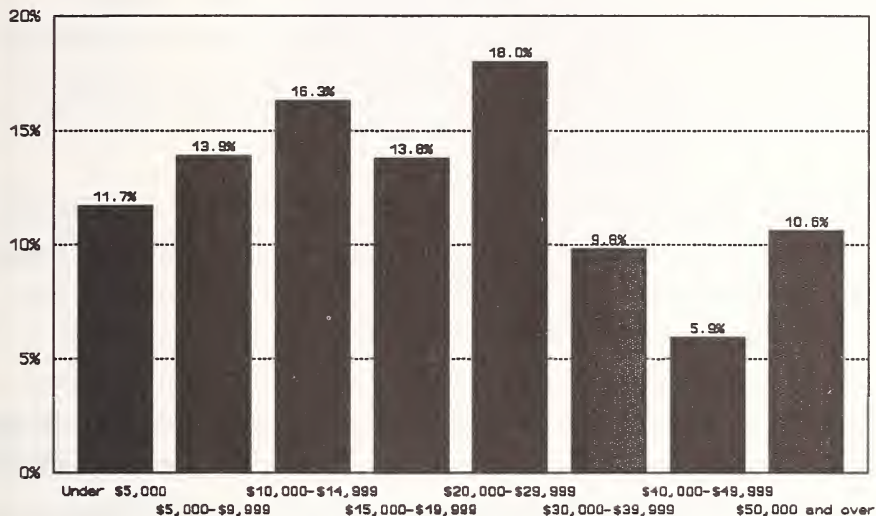
Families with incomes below the poverty level are slightly less likely than families with incomes just above this level to be uninsured (exhibit 3). Those just above the poverty level are less likely to be eligible for publicly financed insurance, and they are also less likely than those with higher incomes to receive employer-sponsored health insurance. Also, these families usually cannot afford to purchase non-group health insurance by themselves.

While many of the uninsured are poor, about 40 percent of the uninsured have incomes greater than 200 percent of poverty. About 11 percent of the uninsured have annual earnings of \$50,000 or more.¹⁶ While they are at risk of catastrophic expenses beyond their ability to pay, this group is likely

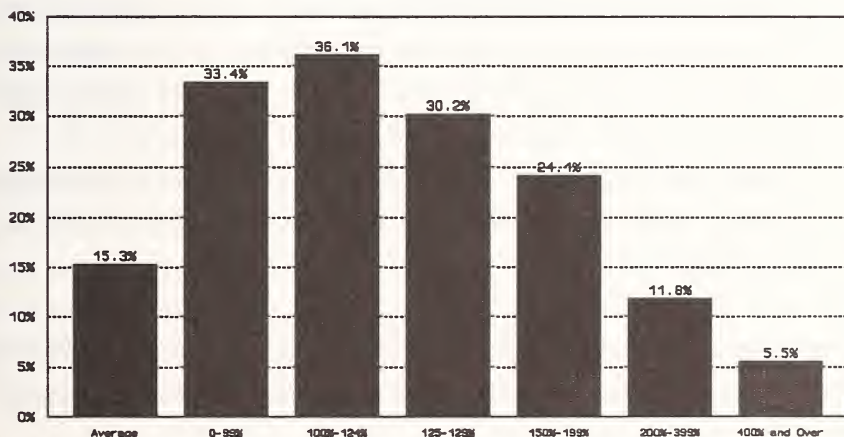
¹⁵ Lewin/ICF analysis of the March 1990 *Current Population Survey*.

¹⁶ *Ibid.*

EXHIBIT 3
PERCENT DISTRIBUTION OF THE NONELDERLY UNINSURED,
BY FAMILY INCOME



PERCENTAGE UNINSURED AMONG THE NONELDERLY,
BY FAMILY INCOME AS A PERCENTAGE OF THE
FEDERAL POVERTY LEVEL ^{fn}



^{fn} The federal poverty level for a family of three in 1989 was \$10,060.

SOURCE: Lewin/ICF Analysis of the March 1990 Current Population Survey.

to be able to afford routine primary and preventive care. The reasons why persons in higher income groups lack insurance are unclear. Among those for whom employer-provided insurance is unavailable, some may decide not to purchase non-group coverage because they have sufficient income and assets to accept the risk of financing their own health care. It is also possible, however, that some of these individuals are in poor or fair health or have chronic conditions and are thus excluded from obtaining coverage by pre-existing condition restrictions in insurance policies.

Employment Status of the Uninsured. About 70 percent of the uninsured are employed or dependents of employed persons. Approximately 20 percent of the uninsured are nonworkers; these include students, homemakers, and retirees.¹⁷ The remaining 10 percent are unemployed persons and their dependents. Among those who are uninsured workers and their uninsured dependents, 66 percent are working adults, 7 percent are nonworking spouses of working adults, and almost 27 percent are dependent children of uninsured working adults. About 70 percent are employed full year, full time, and 13 percent are employed full year, part time (exhibit 4).

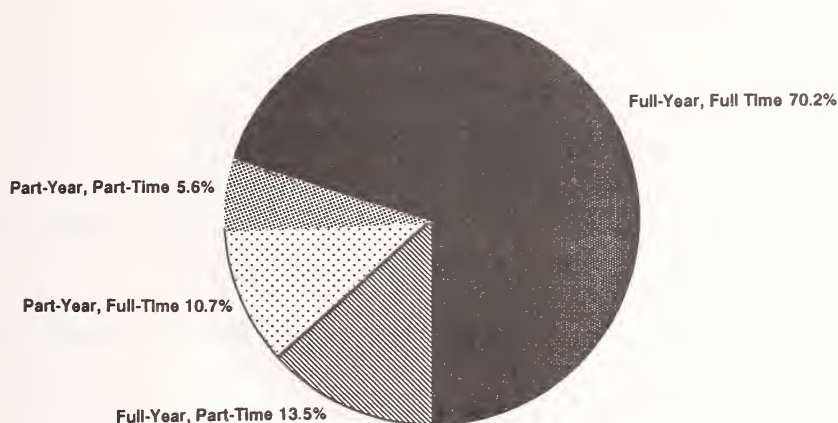
Among uninsured workers, part-time workers and their dependents are more likely to be uninsured than their full-time counterparts. Among part-time workers, families of those employed fewer than 17 hours per week are more likely to be uninsured (77 percent) than families of those working 17 to 34 hours per week (69 percent). Nonworkers are more likely to be uninsured than all other working groups—nearly 21 percent did not have any health insurance in 1989.¹⁸

Workers without employer health insurance (48 percent of the uninsured) are more likely to be employed by firms with fewer than 25 employees

¹⁷ Employee Benefits Research Institute. *Uninsured in the United States: The Nonelderly Population without Health Insurance*.

¹⁸ *Ibid.*

EXHIBIT 4
NONELDERLY WORKERS AND THEIR DEPENDENTS WITHOUT
HEALTH INSURANCE, BY THE WORK STATUS
OF THE FAMILY HEAD



22.7 Million Uninsured Workers and their Dependents.

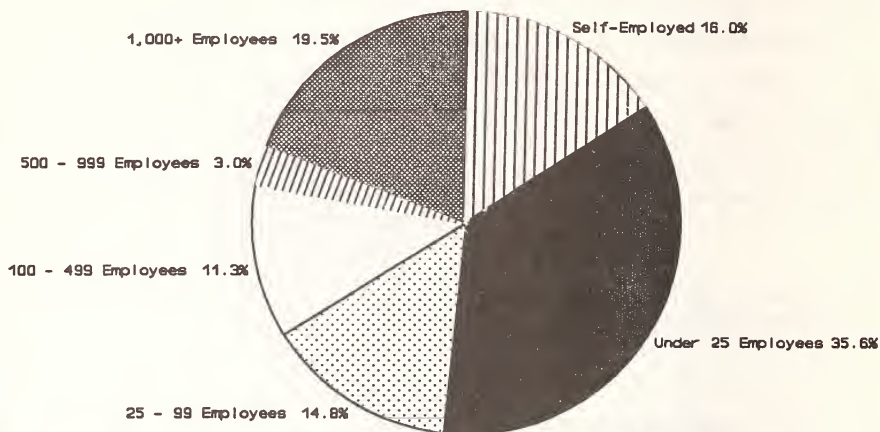
SOURCE: Lewin/ICF Analysis of the March 1990 Current Population Survey.

(36 percent).¹⁹ These firms are the least likely to provide coverage owing to its high cost. Almost 23 percent of uninsured workers are employed by firms with over 500 employees (exhibit 5). In terms of industry, the largest proportion of the uninsured are employed by the service sector and retail trade (exhibit 6). The smallest proportion of uninsurance is found among government employees.

Location of the Uninsured. Approximately 13.5 percent of the U.S. population was uninsured in 1989. Rates of uninsurance vary among States, largely as a result of differences in employer coverage and Medicaid eligibility requirements. In 9 States and the District of Columbia, more than 20 percent of the nonelderly population was uninsured in 1989. Reasons for the differences between States may include variations in average income,

¹⁹ Lewin/ICF analysis of the March 1990 *Current Population Survey*.

EXHIBIT 5
WORKERS WITHOUT EMPLOYER HEALTH INSURANCE
AGED 18 - 64 BY FIRM SIZE



15.7 Million Working Uninsured Aged 18-64

SOURCE: Lewin/ICF Analysis of the March 1990 Current Population Survey.

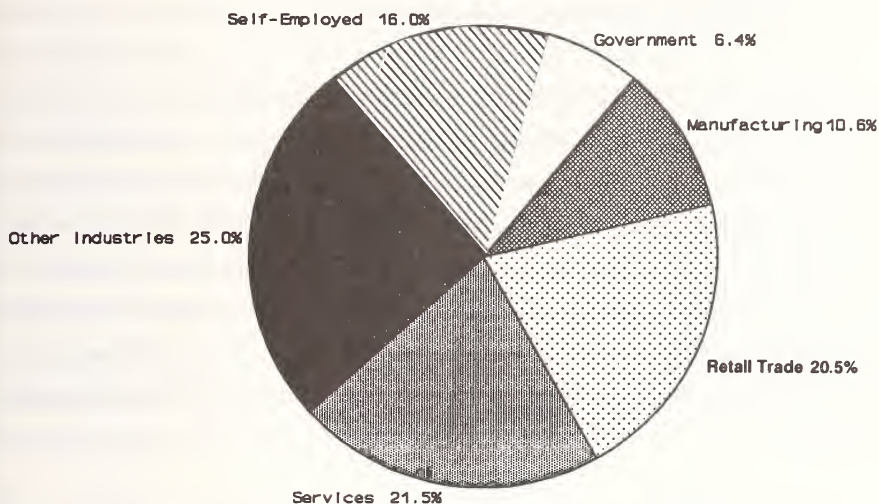
unemployment rates, level of Medicaid coverage, demographics, and State health policy.²⁰

Although families living in or near urban areas represented nearly three-quarters of the uninsured population, those living in rural areas were more likely to be uninsured. Rural families with a head of household employed in agriculture were much more likely to be uninsured at all income levels than either urban families or rural families headed by a nonagricultural worker.

Health Status of the Uninsured. One of the possible consequences of being uninsured is that individuals will have poorer health status because they do not have access to care when they need it. Using data from the National Medical Care Utilization and Expenditure Survey (NMCUES), a Lewin/ICF

²⁰ Employee Benefits Research Institute. *Uninsured in the United States: The Nonelderly Population without Health Insurance.*

EXHIBIT 6
WORKERS AGED 18 - 64 WITHOUT EMPLOYER HEALTH
INSURANCE BY INDUSTRY OF PRIMARY EMPLOYMENT



15.7 Million Uninsured Workers Aged 18-64

SOURCE: Lewin/ICF Analysis of the March 1990 Current Population Survey.

analysis found that on an age-adjusted basis, the uninsured appear to be in poorer health than the insured.²¹ On an age-adjusted basis, about twice as many of the uninsured (4 percent) indicate that they are in "poor" health compared with the insured population. About 11 percent of the uninsured report that they are in "fair" health compared to 7 percent of the insured population. About 53 percent of the insured report "excellent" health compared with about 47 percent of the uninsured.

The role of health insurance in explaining these differences in health status is unclear. A lack of insurance may cause persons to forgo needed care, thereby diminishing health status. In contrast, the causal relationship may go the other way. Poor health status may be the reason an individual is

²¹ Lewin/ICF. *The Health Care Financing System and the Uninsured*.

uninsured. For example, persons in poor health may have lost their jobs and their employment-based insurance. Furthermore, they may not have sufficient income to purchase continuation coverage or non-group coverage and may be ineligible for Medicaid or Medicare.

About 3 million persons with chronic or disabling conditions are uninsured.²² Many, although not all, of these persons have many health care needs which are possibly not being met owing to their lack of health insurance. Working-age persons with activity limiting disabilities, however, are more likely to be uninsured than the overall working-age population. The 1984 SIPP found that of the 21.7 million working-age persons with an activity limiting disability, 19 percent were uninsured. This percentage is slightly higher than the rate of uninsurance in the overall U.S. working-age population.

The Underinsured

Another population that must be considered in public policy discussions regarding health insurance coverage and access to care is the underinsured—those persons who have insurance but coverage insufficient to meet their needs. What constitutes underinsurance is not clearly or consistently defined. The extent to which a particular health insurance plan contributes to underinsurance depends on the specific health care needs, income, and priorities of different populations. This section discusses the definitions of underinsurance, the factors which determine underinsurance, and the trends in employer plans that influence underinsurance.

²² Mathematica Policy Research, Inc. *Task 1: Population Profile of Disability*, prepared for DHHS, Office of the Assistant Secretary for Planning and Evaluation, October 1989. Disability is defined as the inability to perform one or more Activities of Daily Living (ADLs).

Definitions of Underinsurance

Estimates of the number of persons in private health insurance plans who are underinsured range from 12 to 20 million persons depending upon which definitions of underinsurance are used.²³ The underinsured are generally defined as persons who are at risk of incurring "catastrophic" health care expenses even though they have health insurance. However, there is no uniform definition of underinsurance. For example, some define the underinsured as persons enrolled in a plan where there is a 5 percent likelihood of incurring out-of-pocket health expenditures in excess of 10 percent of family income. Others have defined the underinsured as persons who lack coverage for specific types of health services which they may need given their health condition.

Farley's 1985 analysis of the 1977 National Medical Care Expenditure Survey (NMCES) found that an estimated 12.6 percent of the nonelderly population with private health insurance had a 5 percent expectation of out-of-pocket expenses in excess of 10 percent of income. Thus, a family with income at the poverty level might confront catastrophic uninsured expenses at \$1,500, while a family with income in excess of \$100,000 may face catastrophic expenses and thus be considered underinsured only at levels of \$10,000 or higher. Because of the rare nature of high-expense illness and the strong relationship to income, most of those confronting catastrophic health expense, because of either lack of insurance or underinsurance, will be low-income.

The Department of Health and Human Services conducted a study of catastrophic illness which examined the out-of-pocket medical costs of

²³ P.J. Farley, "Who Are the Underinsured?" *Milbank Memorial Fund Quarterly* 63 (1985): 476-503. U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. *Incurring Catastrophic Illness for the General Population: Technical Report*, Washington, DC, 1988.

persons with disabilities and chronic illness. The report concluded that "a significant portion of catastrophic out-of-pocket expenses occurs in families that have members with acute or chronic catastrophic conditions resulting in severe and permanent limitations of activities."²⁴

Using the NMCES, the report found that 6.6 percent of families who had a family member with a limitation in major activity had out-of-pocket costs which exceeded \$2,200 and which constituted more than 5 percent of their family income. Out-of-pocket costs exceeded \$4,400 for 3.6 percent of families with individuals having a limitation in major activity. These estimates indicate that families with individuals having limitations in major activity are more than twice as likely to experience catastrophic out-of-pocket expenses than families without a limited member.²⁵

The NMCES data indicate that 21.4 percent of families with limitation in major activity have out-of-pocket medical expenses which exceed 5 percent of their income, while 9.2 percent have out-of-pocket expenses exceeding 15 percent of their income, and 5.1 percent have out-of-pocket expenses exceeding 25 percent of their income.

Trends in Employer Health Plans Influencing Underinsurance

The covered services and cost-sharing rules of individuals' insurance plans generally determine whether they are underinsured. For example, most private plans cover only charges for covered services in excess of a deductible amount which is typically about \$200 per year. In most plans, the individual is also expected to pay a coinsurance amount for covered charges which typically equal about 20 percent of charges in excess of the deductible

²⁴ U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, *Insuring Catastrophic Illness for the General Population*, 1988.

²⁵ *Ibid.*

amount. Individuals may be considered underinsured if the deductibles and coinsurance amounts under the plan are set sufficiently high that they are at risk of incurring large expenses relative to income. In addition, some plans limit the amount of covered expenses annually or over a lifetime. For example, individuals may not be covered for expenses in excess of \$100,000 over their lifetimes.

Individuals also may be considered underinsured if their health plans do not provide coverage for certain types of expensive health services that they are at risk of requiring (e.g., for mental health or substance abuse). The plan could also underinsure if it places limits on the number of physician contacts or hospital days covered, as is often the case with mental health care and for some services covered by a number of State Medicaid programs.

Three large-scale surveys examine the health care costs, utilization, and sources of payment for a random sample of the U.S. noninstitutionalized civilian population. These are the 1977 National Medical Care Expenditure Survey (NMCES), the 1980 National Medical Care Utilization and Expenditure Survey (NMCUES), and the 1987 National Medical Expenditure Survey (NMES). The drawback of these surveys for examining underinsurance is that the services examined are aggregated into broad service categories such as hospital and physician services and are not defined to assess the adequacy of coverage for specific services that may be essential to persons with certain health conditions.

During the past decade, employers have made a number of changes to their health plans. More employers have established maximum out-of-pocket limits which protect individuals from large out-of-pocket costs beyond their ability to pay. This extension of coverage has likely reduced the rate of underinsurance, especially among middle and upper income workers. At the same time, employers have increased the amount of front-end cost-sharing required by workers in the form of either higher premiums or increased

coinsurance and deductibles. The increased front-end cost sharing requirements may have rendered some low-income persons underinsured. Plans have also increased restrictions for pre-existing conditions which limit coverage for persons with certain health conditions.²⁶ The actual impact of these trends on rates of uninsurance is unclear.

The number of plans with out-of-pocket maximums has increased. In 1989, an estimated 90 percent of employer plans included out-of-pocket caps, up from 79 percent of plans in 1986.²⁷ An increasing number of employers have plans with out-of-pocket maximums of \$1,500 or more as the percent of employers offering plans with maximums under \$1,000 has declined.²⁸

Employers are increasingly requiring employees to pay a larger portion of the premium for health insurance benefits. Since 1980, the proportion of full-time employees whose health care premiums were wholly paid by their employers declined from 72 to 48 percent in medium and large firms by 1989.²⁹ A survey of health plans conducted by the Health Insurance Association of America found that on average the percentage of the premium paid by employers was 85 percent for individual coverage and 71 percent for families.³⁰ In addition, the annual deductibles in health insurance plans have increased substantially during the past decade and average \$194 per worker. These increases in cost-sharing may render some low-income persons underinsured if they cannot afford the deductible or coinsurance amounts.

²⁶ U.S. General Accounting Office. *Health Insurance: A Profile of the Uninsured*. GAO/HRD-88-83. Washington, DC, August 1988.

²⁷ Foster Higgins, *Health Care Benefits Survey, Report 2: Indemnity Plans: Cost, Design, and Funding*, 1990.

²⁸ U.S. Department of Labor, Bureau of Labor Statistics, *Employee Benefits in Medium and Large Firms, 1986*, Washington DC, June 1987.

²⁹ U.S. Department of Labor Statistics, *Employee Benefits in Medium and Large Firms*, June 1990.

³⁰ Cynthia B. Sullivan and Thomas Rice, "The Health Insurance Picture in 1990," *Health Affairs*, Vol. 10 (Summer 1991), pp. 104-15.

Limits in cost-sharing, such as out-of-pocket maximums, do not, however, protect individuals entirely from incurring catastrophic expenses because the cost-sharing limits apply only to covered services under the plan. Thus, an individual could still be considered underinsured if he/she uses services not covered under the plan. Services for alcohol, drug, and mental health care (particularly for debilitating mental health problems such as schizophrenia or severe depression) are typically in these categories. Long-term care services are also excluded from most insurance programs and represent the largest category of uncovered services for the elderly.

Many plans reimburse for services up to a maximum amount per person, after which the individual is responsible for the full amount of charges. About 79 percent of participants in employer health plans sponsored by medium and large firms face a limit on the amount of reimbursement the plan will provide per participant. Lifetime maximum benefit amounts have increased, largely due to the rapid rise in health care costs. About 11 percent of plan participants are in plans which have a lifetime maximum of \$250,000 or less. About 42 percent of plan participants have a lifetime maximum of \$1,000,000 or more. This is three times the percentage of plan participants with this limit in 1986. While these limits are high, a small number of individuals or families will exceed them in a year.

Many health plans carry a pre-existing condition clause that excludes or imposes restrictions on coverage for health problems that employees have at the time of enrollment. The average waiting period before an employee receives coverage for a pre-existing condition is 9 months. The proportion of conventional plans with pre-existing condition clauses increased from 61 percent in 1989 to 65 percent in 1990.³¹ In addition to the number of plans with pre-existing condition exclusions, the number of conditions subject to such exclusions has increased. Also, some conditions that were once

³¹ *Ibid.*

subject to pre-existing condition waiting periods are now grounds for denial of coverage altogether.³² These exclusions present serious consequences for persons with these health conditions. As the list of pre-existing conditions grows longer, the number of Americans who are unable to obtain coverage for their health care needs is likely to grow.

Consequences of Uninsurance and Underinsurance

While it is often perceived that the uninsured do not have access to the health care system, this is an overstatement. Both the uninsured and underinsured use a substantial amount of health care services. Of concern is whether the care they receive is sufficient and appropriate to meet their health care needs. This section examines the use of health services by the insured and uninsured and suggests that differences in their use of services indicate barriers to access to care. Furthermore, these barriers appear to have implications for the health status of these populations.

Postponed or Foregone Care

The uninsured and underinsured may postpone or forego care. This situation has the attendant risk of leading to more severe health conditions. They may defer care for three reasons: (1) They lack the financial resources to obtain care and therefore wait until they are seriously ill; (2) they may lack a usual source of care and not have an entry point when confronting an acute problem; and (3) they may lack knowledge of the importance of obtaining care. Those uninsured who obtain treatment for conditions at later stages in their illnesses face higher costs in terms of more serious illness and time lost from work. The health care system also incurs higher costs owing to greater expenditures associated with treating conditions in more advanced stages.

³² U.S. General Accounting Office. *Health Insurance: A Profile of the Uninsured*.

Utilization of Health Care

Health expenditure survey data confirm that the uninsured consume fewer health care services than the insured. The uninsured have substantially fewer physician office visits per person than do insured persons at all age levels.³³ Overall, uninsured persons under the age of 65 have two-thirds as many physician office visits per person as the insured. Among children under age 15, the uninsured had an average of one-third fewer physician visits per person per year than those with insurance. Hospital outpatient utilization, which might be expected to substitute for physician care among the uninsured, is also substantially lower for the uninsured than the insured.

Uninsured pregnant women have about 23 percent fewer physician office visits per person compared to insured pregnant women.³⁴ Another study conducted by the Children's Defense Fund found that three times as many uninsured women as insured women received delayed prenatal care.

The uninsured also obtain fewer preventive services than the insured. A study of 10,000 middle-aged women from the National Health Interview Survey found that basic screening for breast cancer, cervical cancer, hypertension, and glaucoma was significantly less for uninsured women than for those who had insurance. The proportion of uninsured women receiving blood pressure checks was 7 percent below the proportion of insured women; the proportion for all other services was about 15 percentage points below

³³ Estimates presented here are based upon expenditure and utilization data provided in the 1980 National Medical Care Utilization and Expenditures Survey (NMCUES), updated by Lewin/ICF to reflect trends in utilization, health expenditures and population characteristics between 1980 and 1988. Thus, the utilization and expenditure data presented here should be considered projections from historical data rather than analyses of actual survey data for 1988.

³⁴ *Ibid.*

the insured. These uninsured women are likely to be low-income and at higher risk for these diseases.³⁵

Differences in Treatment and Health Outcomes

A number of studies have examined differences in health outcomes and treatment protocols among the insured and the uninsured. Results from these studies suggest that the uninsured are admitted to hospitals for potentially avoidable conditions more often than the insured, and when hospitalized, the uninsured do not receive the same treatment as the insured.

A study for the DC Hospital Association of hospitalized patients revealed that the uninsured are three times more likely to be hospitalized for a medically "preventable/avoidable" admission than are the privately insured or the Medicaid population. About 40 percent of the uninsured had avoidable admissions compared with 21.2 percent for Medicaid recipients and 12.2 percent for other insured persons. While the percentage of avoidable admissions is highest for the uninsured, the insured also have avoidable admissions, indicating that other factors apart from insurance also influence the incidence of these conditions.³⁶

A study examining the differences in treatment between the insured and the uninsured once hospitalized found that the uninsured receive less treatment once they are hospitalized than the insured.³⁷ Controlling for severity of illness, the uninsured were discharged earlier and underwent fewer medical procedures than patients insured by Blue Cross. Compared with Medicaid

³⁵ S. Woolhandler, M.D., and D. Himmelstein, M.D. "Reverse Targeting of Preventive Care Due to Lack of Health Insurance." *The Journal of the American Medical Association*, Vol. 259(1988), pp. 2872-4.

³⁶ Lewin/ICF. *Health Care for the Medically Indigent in the District of Columbia*, Washington, D.C., September, 1988.

³⁷ J. Weissman and A.M. Epstein, "Case Mix and Resource Utilization by Uninsured Hospital Patients in the Boston Metropolitan Area." *The Journal of the American Medical Association*. Vol. 261 (1989), pp. 3572-6.

patients, the uninsured were discharged earlier but had similar rates of medical procedures. The lower utilization does not necessarily indicate that the uninsured are receiving inadequate care. The reasons for the differences in care are unclear. It may be that the providers are aware of the patient's insurance status and provide different services or that the patients themselves exert some influence over their hospital care to avoid expensive medical bills.

The uninsured are more likely than insured patients to be admitted to hospitals on weekends, indicating that the conditions of the uninsured are less likely to be discretionary. The uninsured are also less likely to receive coronary artery bypass surgery and replacement of knees and hips. They are more likely to have abnormal results on laboratory tests, indicating that these tests are performed on the uninsured when the physician is reasonably certain of the outcome. Finally, the uninsured are more likely to die in the hospital than the insured, indicating that they may be sicker upon admission than the insured and less likely to be admitted for discretionary services.³⁸

Out-of-Pocket Costs

Average out-of-pocket expenditures for uninsured persons are lower than for insured persons. Estimates from the adjusted NMCUES data indicate that the out-of-pocket expenditures in 1988 for families with one or more uninsured member was about \$968 compared with about \$1,292 for families where all members are insured.³⁹ Out-of-pocket spending for the uninsured is lower than among those with insurance for several reasons: the uninsured use fewer health care services than do those with insurance; they are younger and healthier on average than the insured; they do not bear a share of premium costs for their insurance; and they pay out of pocket for only about half the

³⁸ Jack Hadley, Earl P. Steinberg, and Judith Feder, "Comparison of Uninsured and Privately Insured Hospital Patients: Condition on Admission, Resource Use, and Outcome," *Journal of the American Medical Association*, January 16, 1991, pp. 374-9.

³⁹ Lewin/ICF, *The Health Care Financing System and the Uninsured*.

care they receive. Large out-of-pocket expenses are a particular risk for persons with high-expense illnesses, such as AIDS. One study found that persons with AIDS and their families are estimated to be paying about 20 percent of the cost of health care out of pocket.⁴⁰

Out-of-pocket spending for the uninsured is lower than among those with insurance for several reasons: The uninsured use fewer health care services than do those with insurance; they do not bear a share of premium costs for their insurance; and the uninsured pay out of pocket for only about half the care they receive.⁴¹ In addition, the insured generally have higher incomes than the uninsured; so they are more likely to obtain some forms of health care that may not be covered by insurance, such as dental care and mental health services.

This paper presented a profile of the uninsured and underinsured and examined the consequences of uninsurance on the use of health services and out-of-pocket costs. As shown, the uninsured and underinsured are a diverse population, and evidence suggests that the consequences of uninsurance are serious in terms of access to care. The next issue papers in this section describe the current system of health care financing and delivery and the gaps in coverage.

⁴⁰ A. Pascal, et al., "State Policies and the Financing of Acquired Immunodeficiency Care." *Health Care Financing Review*, Vol. 11 (Fall 1989), pp. 91-104.

⁴¹ The rest of their care is paid by charity care, county hospitals, general assistance, and other public sources.

PRIVATE HEALTH INSURANCE

For the great majority of Americans, private health insurance (both employment-based and self-purchased) is the primary source of financing for health care. Three-quarters of Americans under age 65 are covered by some form of private health insurance. Over two-thirds are covered by employer-sponsored health plans. Approximately 14 million people under age 65 are covered by insurance bought by individuals.⁴² As policy makers consider options for increasing access to health care for Americans currently without health insurance, it is important to understand the potential—and limitations—of the private market for health insurance as a mechanism for expanding coverage. This paper describes the growth and structure of private health insurance in the United States. It then presents the major issues confronting the private health insurance market and the implications for coverage.

Role of Private Health Insurance

This section presents an historical overview of the growth of private health insurance and describes the structure of the private health insurance industry.

Growth of Private Health Insurance

Private health insurance began to expand during the 1930s and grew dramatically following World War II. During the 1930s, hospitals and physicians faced reduced demand for their services and an increase in the number of persons who were unable to pay for services rendered. Blue Cross and Blue Shield plans were established with the assistance of hospital

⁴² Henry Aaron, *Serious and Unstable Condition: Financing America's Health Care*, (The Brookings Institution, Washington, DC, 1991).

and physician organizations to provide insurance coverage for hospital and physician services. The growth of commercial insurance followed during the 1940's, prompted by a trend toward employment-based insurance.

The history of private health insurance in the United States may be grouped into four major periods: (1) the World War II era: emergence of private health insurance; (2) the Post-World War II era: extension of private health insurance and the growth of risk selection; (3) the 1970's: advent of self-funding; and (4) the 1980's and 1990's: growing competition among insurers.

The World War II Era: Emergence of Private Health Insurance. Private health insurance was not widely available prior to World War II. In 1940, only 9.3 percent of the U.S. population was covered by private insurance for hospitalization and only 4.0 percent was covered for medical expenses.⁴³ In the following decade, the labor market advantages of employment-based group insurance to employees were reinforced during World War II. In 1942 only 37 companies were writing group health insurance; by 1951 this number had risen to 212 companies.⁴⁴

The exclusion of employer-paid fringe benefits from the taxable income of employees provided another strong impetus for the growth of employment-based health insurance. In 1954 the change to the Internal Revenue Code excluded employer health insurance premiums from an employee's taxable income, thereby creating a bias toward more insurance in lieu of cash compensation. This exclusion is estimated to provide individuals and businesses with about \$56 billion in tax free income in current prices.⁴⁵

⁴³ Paul Starr, *The Social Transformation of American Medicine*, (New York: Basic Books, Inc., 1982).

⁴⁴ Congressional Budget Office, *Rising Health Care Costs: Causes, Implications, and Strategies*, April 1991.

⁴⁵ Ibid.

Another important ruling during this period was that health and pension benefits were a mandatory subject of collective bargaining.

During the 1940's the insurance market was divided among commercial insurers and Blue Cross and Blue Shield plans (these were organized on a state by state basis). Blue Cross plans controlled most of the hospitalization market, with enrollments increasing from 6 million to 37.6 million during the 1940s.⁴⁶ By the end of the decade, the commercial insurers began to rival the dominance of the Blues' plans in the hospital market. The total number of people covered solely by commercial insurers in 1949 was estimated at 28 million, compared to over 31 million enrolled in Blue Cross.⁴⁷ The commercial insurance carriers were the major providers of medical insurance, with 65 percent of this market by 1950. During this time, health maintenance organizations such as Kaiser, Group Health Association, and Group Health Corporation of Puget Sound began to attract a portion of the market.

The Post-World War II Era: Extension of Health Insurance and the Growth of Risk Selection. Much of the changing history of the health insurance industry over the past 40 years can be understood as an evolution in the strategies used by insurers to influence the selection of risk. The original concept of health insurance was that all members of a community would pay into a pool to protect each member against the high costs of an illness. With community rating, everyone in an area faced the same premiums regardless of their personal health history.

A major factor contributing to the growth of commercial insurers during the 1940's and 1950's was the use of experience rating to set premiums for large groups. Under experience rating, premium costs are based on a group's prior health history. Groups exhibiting high risks of large health expenses found

⁴⁶ Paul Starr, *The Social Transformation of American Medicine*, (New York: Basic Books, Inc., 1982).

⁴⁷ Paul Starr, *The Social Transformation of American Medicine*.

the risk-based premiums excessive compared to the community-based rates. Better risks, in turn, found the experience-rated terms financially preferable, and self-selected away from community rated plans.

Employers were drawn to the commercial insurers because they offered lower rates for healthy, low-risk workers. By contrast, the Blue Cross and Blue Shield plans continued to set premiums through community rating. As a result, high risk enrollees in Blues plans paid substantially less for health insurance than if premiums were based on their level of risk.

The commercial insurance carriers, however, offered group insurance products that were priced based on the demographic characteristics of the customer's employees and the actual benefits payout associated with that group, not the carrier's aggregate experience across all clients. The process of using demographic adjustments to community rates and actual benefits paid out to set the premium led to high risk groups dropping commercial coverage because they could find less expensive coverage through the Blues plans. Likewise, the good risks currently covered by the Blues plans recognized that they could benefit from the experience-rated products and switched to commercial insurers. As a result, the pool of insured covered by the Blues plans began to rise in cost relative to the commercials, creating further price differentials.

As the commercial insurers began to attract the low-risk employee groups, only the high-cost groups would have been left with the Blues plans. Had this process continued indefinitely, the Blues would have been forced to raise their rates so high that even average-risk groups would have found it cheaper to buy commercial insurance. As a result, the Blues moved toward experience rating. By the end of the 1950s, a majority of Blues plans were experience rating some employee groups.⁴⁸ By the late 1960s and early

⁴⁸ *Ibid.*, p. 330.

1970s, most Blues plans experience-rated large customers, but most maintained community rating and open enrollment for individual businesses and small employers.

The 1970s: Advent of Self-Funding. The advent of self-insurance among employer groups further reduced the risk pool for insurance. The primary catalyst for the escalation of self-funding was the enactment of the Federal Employee Retirement Income Security Act (ERISA) of 1974. ERISA pre-empts State laws affecting employer-provided plans when the employer chooses to self-insure—that is, to assume the risk of paying health claims directly rather than purchase health insurance for employees. Self-insured employers are exempt from state-mandated benefit laws, state taxes on insurance premiums, and other regulations that increase the cost of group health insurance. These exemptions have encouraged self-insurance, particularly among large employers.

Self-funding further segmented the insurance risk pool. The departure of the large employer groups from the portfolios of the Blues and commercial plans increased the riskiness of those portfolios, thereby increasing the amount of premium income needed to service them. In 1979, 19 percent of medium and large employers were self-insured. By 1988, 66 percent were self-insured.⁴⁹ Both the Blues and commercial insurers came to be administrators of self-insured plans of large employers.

The 1980s and 1990s: Growing Competition Among Insurers. The growth of the private health insurance market has continued to the present with approximately 70 percent of the non-elderly population receiving coverage through employer-financed health insurance. Not surprisingly, this growth coincides with major increases in both the use and cost of health care services. In 1950, expenditures under private health insurance coverage

⁴⁹Congressional Research Service, *Health Insurance and the Uninsured: Background Data and Analysis*, May 1988.

comprised 0.67 percent of wages and salaries. By 1970, that figure had grown to 2.67 percent. In 1990, it is estimated to exceed 7 percent.⁵⁰

With the cost of health care services and, consequently, the cost of insurance rising, employers are becoming increasingly sensitive to the price of the insurance they are purchasing. For small employers, price is the primary factor upon which the decision to purchase health insurance is made. It follows that insurers, in order to remain competitive, must control both their administrative costs and the cost of benefits.

Structure of the Current Employment-Based Health Insurance Industry

Today, health insurance products in the U.S. are sold by a variety of firms. At any given time, the availability and affordability of health insurance will be influenced by the differing behaviors of various classes of companies: Blue Cross and Blue Shield plans, commercial insurers, companies that provide services to employers who fund their own health benefits, and managed care companies.

Blue Cross and Blue Shield. Blue Cross and Blue Shield plans are typically not-for-profit corporations chartered under special state statutes that often impose special obligations on these companies to make affordable health insurance available to the public. These obligations often include holding open enrollment periods, offering individual policies, and in some States, assisting low-income persons in obtaining coverage. In return for meeting these obligations, the Blues plans may be exempt from health insurance premium taxes or regulatory requirements such as mandates to offer particular benefits. Furthermore, the Blues plans are the largest insurer of small groups and individuals.

⁵⁰Department of Commerce, *Statistical Abstract of the United States*, 109th edition, 1989.

Commercial Insurers. The commercial insurance companies initially developed health insurance products as a complement to their life insurance and property-casualty insurance business, thus providing their agents with a means of offering a full line of insurance services to their customers. The earliest health-related products offered by commercial insurers provided cash benefits in the event that certain adverse health developments occurred. In addition to insuring against physical disabilities that prevented the insured from working, insurers sold policies that compensated for the occurrence of certain diseases or paid a fixed schedule of benefits on a per diem basis during spells of hospitalization.

In 1945, products of the disability income type comprised a majority of the health-related business of the commercial insurers. Today, those products represent less than 10 percent of the commercial health insurance business. The balance of commercial health insurance sold is in the form of hospital and medical expense policies that provide payment for specific medical services, rather than lump sum cash payments.

A second major market for the commercial insurance industry is in the sale of insurance and services to employers that wish to "self-fund" some portion of the benefit package for their employees. Many of the larger commercials offer service contracts to such employers for claims administration and other services typically provided by insurance companies. In addition, the commercials offer "stop-loss" and "minimum premium" policies to such employers which, in exchange for a prepaid premium, limit the employer's liability in the event of significant variations from the expected claims payout. As a result of these products, self-insurance has become a viable option for many employer groups that would have been too small to self-insure without significant risk of catastrophic loss. Today, some groups as small as 25 lives are purchasing this form of self-funded coverage from the commercial industry.

Third Party Administrators. The proportion of companies that self-insure has risen sharply, from an estimated 20 percent in 1980 to 52 percent in 1989.⁵¹ As noted above, by self-insuring, companies are exempt from restrictions that states impose on private insurance companies. The large number of employers who fund their own health benefits has created a demand for administrative services to execute the health benefits program. This demand has been filled, in part, by the willingness of the Blues and the commercial insurers to sell "administrative only" or "minimum premium" type contracts to these accounts. The balance, particularly for larger accounts that do not require stop-loss protection, are serviced by a significant and growing number of private companies that specialize in administrative services, and do not offer insurance to their companies. These firms are known as "third party administrators" or TPAs.

Managed Care Companies. A significant and growing proportion of health care coverage is provided by entities that vertically integrate health services delivery with insurance coverage. Managed care companies such as Health Maintenance Organizations (HMOs), Preferred Provider Organizations (PPOs), and Independent Practice Associations (IPAs) have had a major impact on the health insurance market. Because HMOs require that enrollees only obtain services from providers with whom the HMO contracts, and because they exert control over the decisions of contracted providers, they have the potential to provide comprehensive health services for lower premiums than traditional insurers.

HMOs, in their current form, developed and gradually spread during the 1930's and 1940's, particularly on the West Coast. Their growth was slow, however, until the 1970's. In 1973 federal legislation was passed that encouraged their growth. In 1980 there were 236 HMOs providing services

⁵¹General Accounting Office, *Health Insurance: Cost increases Lead to Coverage Limitations and Cost Shifting*, GAO/HRD-90-OS, May 1990.

to over 9 million people. By December 1989, there were 591 HMOs with nearly 35 million members.⁵²

The Non-Group Insurance Market

Individuals who do not have access to employment-based health insurance may obtain coverage by purchasing it directly from Blue Cross and Blue Shield, commercial insurers, or HMOs. About 14 million persons under age 65 are enrolled in non-group plans. Commercial insurers cover the majority of these individuals (9 million), Blue Cross/Blue Shield plans cover 4 million persons and HMOs enroll about 1 million.⁵³

Individuals who purchase non-group coverage tend to be persons whose employers do not provide coverage or persons between jobs or early retirees not yet eligible for Medicare. Almost 10 percent of persons with incomes below \$10,000 have non-group coverage. A large number of these low-income persons purchasing non-group coverage may be students whose parents purchase the coverage.

- **Blue Cross and Blue Shield Plans.** Blue Cross and Blue Shield plans insure about 4 million individuals under age 65. The majority of these individuals are age 55 to 64. About one-third of these plans hold open enrollment periods whereby individuals are accepted without regard to health conditions. Plans usually community-rate policies for all individual applicants. Rates for these policies are generally more expensive than community rates for group enrollees.

⁵²Congressional Budget Office, *Rising Health Care Costs: Causes, Implications, and Strategies*, April 1991.

⁵³U.S. Congress, Office of Technology Assessment, *AIDS and Health Insurance*, Staff Report, Washington, 1988.

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- **Commercial Insurers.** Commercial insurers provide the majority of individual policies. They typically apply medical underwriting to policies and charge higher rates to persons with specific health conditions.
 - **HMOs.** HMOs may offer insurance to individuals at the established community rate or reject the applicant out right. As a result, HMOs have a much higher denial rate for individual applicants than do commercial insurers or the Blues. Some HMOs do not offer non-group coverage except as conversion coverage for members who leave the group.

Major Issues Confronting the Private Health Insurance Market

Increased competition and rising health care costs have led to changes in the business practices of the private health insurance industry. Some of the practices have negatively affected the availability and affordability of health insurance in the U.S. Among these practices are increasing sophistication in identifying and excluding from coverage individuals and/or groups that are likely to incur large health care expenses, and the pricing practices for small group insurance policies. In response to these changes and the rising cost of insurance, employers have greater incentives to self-insure, modify their scope of coverage and reassess their role in the provision of retiree health benefits. Disturbed by the impact of these trends on coverage, a number of commissions have called for major reform of the private health insurance industry. These reform efforts have been influenced by a growing perception that, if allowed to continue on its present course, only the healthy will be able to obtain private health insurance in the near future.

Criticisms of the private health insurance industry highlight the conflict between the concept of insurance coverage as protection against unpredictable risk and the concept of health care as a right. Historically, the role of insurance has been to provide protection against unpredictable risks, such as fire and accidents. Over time this orientation has changed, partly due to the value placed on health care and to the evidence that medical intervention at earlier stages can prevent future catastrophic events. The wide-spread availability of health insurance has increased utilization of health services and, as a result, driven up health care costs and insurance premiums. It is these rising costs that are the major impetus for changing industry practices.

A look at recent increases in insurance premiums puts these issues in perspective. Premiums for private health insurance plans have increased substantially in recent years. Between 1977 and 1987, the average premium paid by employers rose from \$1,111 to \$1,656, or by 49 percent.⁵⁴ For the past three years premiums for family coverage have increased 12.7 percent between 1987 and 1988, 24.4 percent between 1988 and 1989 and 14.6 percent between 1989 and 1990.⁵⁵ This rise in premiums has led some businesses to drop insurance coverage and increase copayments and deductibles, and private insurers to explore new ways of reducing costs.

Health insurance premiums are consuming an increasing proportion of employer payroll. In 1970, health benefits represented 2.67 percent of total compensation and 23 percent of total benefits. By 1989, health benefits represented 5.8 percent of total compensation. For small firms, the ratio may be as high as 30 percent. Health benefits represented 33 percent of total fringe benefits in 1980 and 46 percent in 1989.⁵⁶

⁵⁴Ibid.

⁵⁵Cynthia B. Sullivan and Thomas Rice, "The Health Insurance Picture in 1990," *Health Affairs* (Summer 1991), pp. 105-15.

⁵⁶K. Levit and C. Cowan, "The Burden of Health Care Costs: Business, Households, and Governments," *Health Care Financing Review*, Vol. 12 (Winter 1990), pp. 127-138.

One survey of employers that offer health benefits found that the average cost per employee in 1989 was \$2,600, which represented almost 11 percent of payroll. The same survey found that average cost per employee rose to \$3,217 in 1990, a 24 percent increase.⁵⁷

With this overview of the rising cost of insurance, this section discusses the consequences of industry practices on the nature and extent of insurance coverage in the U.S.:

- barriers to coverage for small employers and individuals;
- growth of self-insurance;
- changes in scope of coverage; and
- reassessment of retiree health benefits.

Barriers to Coverage for Small Employers and Individuals

Attention has focused on the barriers to health insurance for small employers, particularly because about one-third of the working uninsured are employed by firms with fewer than 25 employees.⁵⁸ Many employers, particularly small employers, currently do not offer health benefits. A study conducted by Lewin/ICF for the Small Business Administration found that 44 percent of all firms do not offer health benefits.⁵⁹ The study showed that the percentage of firms that do not offer health benefits ranges from about

⁵⁷A. Foster Higgins & Company, Inc., Foster Higgins Health Care Survey, Report 1, Indemnity Plans: Costs, Design and Funding, (New York, N.Y.: A Foster Higgins & Company, Inc., 1991).

⁵⁸Lewin/ICF analysis of the March 1990 *Current Population Survey*, 1991.

⁵⁹ICF, Incorporated, Health Care Coverage and Costs in Small and Large Business, *Final Report*, prepared for the Office of Advocacy, U.S. Small Business Administration (SBA), Washington, D.C., April 1987.

54 percent for firms with 10 or fewer employees to about 2 percent for those with 100-499 employees.

The most common barrier to employers in obtaining health insurance is affordability. The SBA survey found that the most commonly cited reasons for not providing coverage were insufficient profits and the high costs of insurance. Other reasons include job turnover, lack of coverage for part-time workers and the lack of availability of insurance. Since the major reason for not offering insurance is price, this section discusses the factors that contribute to the high cost of insurance for small employers and individuals. Specifically, it discusses how risk selection, high administrative costs, and the rating of small business insurance has contributed to reducing the availability and affordability of coverage.

Risk Selection. The rising cost of health care and the growing price sensitivity of employers has increased the role of risk selection as a means of slowing the rise in insurance premiums. Many insurers attempt to exclude high cost groups and individuals from coverage or design policies to protect the insurer from the consequences of high-cost illness. These exclusions are particularly evident in the market for small group and individual coverage; in fact, it is epidemic in the market for very small (i.e., under ten employees) groups because many believe that accurately rating for catastrophic losses in a group that small is impossible.

Risk selection can result in significant cost savings. For example, in 1988, five percent of the privately insured U.S. population accounted for 52 percent of the health care services delivered.⁶⁰ An insurer who could exclude all of these individuals from the risk pool could charge a premium equal to one-half of the nationwide per capita expenditures. Risk selection strategies may

⁶⁰Lewin/ICF, *Projecting the Changing Employer Health Insurance Environment: 1987-1994*, report prepared for the Assistant Secretary for Planning and Evaluation, DHHS, June 1990.

take three forms: (1) industry underwriting; (2) medical underwriting; and (3) pre-existing condition exclusions.

Industry Underwriting. Many commercial insurers have decided not to sell insurance to entire industry and occupation groups which they believe represent unacceptable (i.e., high or unpredictable) risks. Industry underwriting is used to reduce health care expense losses for insurers and health maintenance organizations (HMOs) by excluding coverage entirely for certain types of businesses, by specifying them on a "do-not-write" list, and/or offering coverage for these businesses at increased premium levels.

Factors such as an unstable work force (i.e., high turnover), exposure to highly toxic substances or hazardous conditions, unusually high utilization of health services among employees, and employee life-style characteristics affect placement of an industry group on a "do-not-write" list versus being underwritten but with significant premium increases. For example, dry cleaning businesses, farmers, hair dressers and asbestos workers are commonly found on industry "do-not-write" lists. Bars and restaurants, taxi companies and health care workers are typically required to pay higher premiums than other business types. The General Accounting Office lists 29 industries that are ineligible for health insurance under selected insurer plans, including bars and taverns, commercial fishing, construction, foundries, grocery stores, hospitals and nursing homes, liquor stores, roofing companies, security guard companies, and trucking companies.⁶¹

Medical Underwriting . Medical underwriting is another means of limiting an insurer's unexpected loss exposure. Although underwriting practices vary by insurer, they typically involve detailed analyses of the health characteristics of small group members and individuals to determine whether the they present an acceptable risk. In many instances, the underwriting

⁶¹General Accounting Office, *Health Insurance: Cost Increases Lead to Coverage Limitations and Cost Shifting*.

process also involves rules designed to prevent adverse selection, such as minimum enrollment requirements among employees in the firm.

The specific underwriting practices used vary by insurer. Some insurers issue questionnaires to collect information on past history of diseases and general questions concerning vital statistics and recent visits to hospitals. Questions concerning AIDS have also been added in jurisdictions where permitted. Some insurers rely upon the truthfulness of applicant statements while others make use of "attending physician statements" (APSSs) and data from the Medical Information Bureau (MIB) to confirm reported information. The purpose of this type of detailed review is to avoid accepting persons with conditions that will require some type of medical intervention like an expensive hospitalization or extensive testing/treatment and thus incur above average medical claims expenses during the first year or years of coverage. Based on the nature of the risks disclosed, the insurer's policies, and relevant state laws, the insurer then has a number of options to limit its risk:

- reject the entire applicant group as uninsurable;
- accept the group, provided that one or more specific individuals are excluded from all coverage;
- accept the group and all individuals, but put specific limitations on benefits for specific individuals; or
- accept the group without special benefit limitations, but assess a higher premium than the normal group rate for covering specific individuals.

The last two categories of activity are often referred to as placing "riders" on a group policy. One increasingly common form of rider is to modify the annual or lifetime dollar benefit limits for specific individuals within the

group. While treatment for the condition will be covered under those limits, the insurer is able to limit losses to more manageable levels and avoid the cost of catastrophic outlier cases.

Many states have statutes that prohibit excluding coverage for one or more persons in a group. This means that for many small groups, one member failing the health screen results in denied coverage for all of the others in the group, or coverage at very high premium levels.

New diagnostic technologies are being developed and will provide additional expertise for medical underwriting purposes. For example, molecular probes allow clinicians to assess an individual's risk for particular genetic diseases and cancers. As these techniques become more sophisticated, clinicians will be able to detect risk for common diseases like coronary heart disease, diabetes, and schizophrenia.⁶² The implications of applying such techniques to medical underwriting are great, as more detailed medical information will permit more extensive risk selection.

Pre-Existing Condition Exclusions. Pre-existing condition exclusions are used to reduce an insurer's expected first year medical claims expenses. Medical care required to treat a condition that was diagnosed and/or treated prior to the onset of coverage is generally excluded from coverage for some specified period (often six to twelve months). Such features are virtually standard in all health insurance policies today. Most small group and individual policies have pre-existing condition clauses because they reduce the cost of the premium for the first year. This is because only "new" conditions are covered, and the cost of this utilization of services can be better predicted.

⁶²H. J. Wolfe, "DNA Probes in Diagnostic Pathology," *American Journal of Clinical Pathology*, September, 1988, pp. 340-344.

The industry experience with pre-existing condition exclusion (PCE) clauses has been that first year utilization experience has been low to normal. However, in the second year utilization is often significantly higher because the individuals have met the PCE waiting period requirement, thereby raising insurance premiums. Some small businesses find the premium no longer affordable and secure other coverage through another insurer who most likely includes PCE language in the policy. This means that the individual with a medical problem is once again not eligible for coverage of an existing medical problem for yet another waiting period of up to a year.

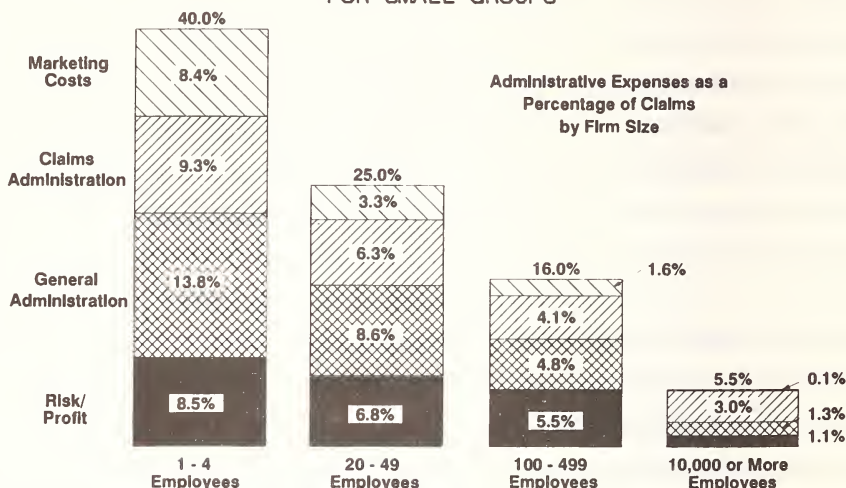
The result of medical underwriting and pre-existing condition exclusions is that individuals or small groups with records of high costs and industries or members of occupations with high risks may be offered insurance only at rates several times the community average, or they may be denied coverage altogether. People who belong to groups with a high incidence of certain diseases, such as AIDS, or who have certain pre-existing conditions find it difficult to buy coverage. Workers in hazardous occupations also find that insurance coverage is difficult or impossible to obtain.

High Administrative Costs. Health insurance premiums for small business are generally higher than among larger firms in part because small employer insurance is more expensive to administer and market. The added administrative expense results in small business health insurance premiums which are up to 35 percent greater than those for large employers with the same coverage (exhibit 1).⁶³

It is generally more expensive to market health insurance to small employers than to larger firms. Most insurers market to small businesses through networks of brokers and sales agents who are paid on a commission basis.

⁶³Hay/Huggins Company, Inc., as presented in Congressional Research Office. *Cost and Effects of Extending Health Insurance Coverage*, Library of Congress, 1988.

EXHIBIT 1
INSURANCE IS MORE COSTLY TO ADMINISTER
FOR SMALL GROUPS



SOURCE: Hay/Huggins Company, Inc., as presented in Congressional Research Office, "Cost of Extending Health Insurance Coverage," Library of Congress, 1988.

Sales commissions generally involve rather high fixed costs which must be allocated over the employer premium payment. Consequently, sales commissions as a percentage of claims range from about 8.4 percent for small groups to less than one percent for the largest groups.

Claims processing and general administrative expenses also tend to be higher for small groups than for larger employers. Larger firms can reduce their administrative overhead due to the economies of scale in insuring a larger number of persons under a uniform benefit package, and spreading risk across a larger pool thus reducing risk allowances for unexpected losses. Claims processing costs range from about nine percent of claims for small firms to about three percent of claims in the largest firms. General administrative costs, which include the cost of establishing and underwriting a policy, vary from about 14 percent of claims in small firms to about one percent among large employers.

Small employer plans present a greater risk of unexpected losses than do larger firms. The actual claims experience for a particular group is difficult to predict with any degree of certainty. A single, unexpected high expense claim could easily exceed total premium payments for the entire small group. Furthermore, it is possible that the uncertainty in predicting claims is increasing over time with the advent of new and increasingly expensive treatments.

Due to this uncertainty in predicting claims, insurers typically include a risk loading factor in their premium. This risk allowance declines as firm size increases because the certainty in predicting aggregate claims experience improves as the size of the group increases. The combined loading factor for risk and profit varies from about 8.5 percent of claims in the smallest firms to about one percent of claims for the largest groups.

Rating of Small Business Insurance. Small business insurance premiums are generally set using a practice known as "durational rating." Durational rating discounts the premium in the early years of a policy to reflect the savings to the insurers resulting from pre-existing condition clauses and medical underwriting. As the pre-existing condition clauses expire over time, premiums will rise in a pattern known as the "aging curve." Thus, the employer premium is discounted in early years to reflect these initial savings and increased in subsequent years to reflect the aging of the policy.

Under durational rating, however, premiums at renewal increase sharply as the pre-existing condition clauses expire. The increase in premium attributed to the aging curve is often as much as 30 percent at the time of the first renewal.⁶⁴ Premiums at subsequent renewals will also increase as the benefits of the underwriting erode over time.

⁶⁴Howard Bolnick, "Why Small Group Programs Fail," *Best's Review*, Vol. 84.

Many employers facing these premium increases respond by seeking coverage elsewhere. Their changing coverage is facilitated by brokers who receive higher commissions for sales of new policies than for renewals. This process, known as churning, results in frequent changes in sources of insurance for some small employers. Some insurers report that up to 70 percent of their business turns over each year due to churning of the market.

Growth of Self-Insurance

Over the past two decades, employers have increasingly pursued self-insurance as an alternative method for financing their health care plans. The common reason given by small employers who choose to self-insure is that self-insurance allows employers to avoid costly state-mandated benefits, under exemptions of ERISA. For many small employers, however, the advantages of self-insurance are greater than simply obtaining exemptions from cost mandates. Groups that perceive themselves to be better risks than average for their actuarial class can self-insure and capture the advantages of favorable selection. They may also avoid insurance premium taxes and realize the benefits of interest income associated with fund management which normally accrues to the insurance carrier. Another factor influencing self-insurance is the capacity of a firm to develop "wellness" programs that are expected to reduce health insurance costs through no-smoking, exercise and anti-drug programs of the employer.

The primary drawback to self-insurance is the potential increased risk of large losses due to unexpectedly high major medical claims. It was for this reason that, historically, only large firms (i.e., those employing more than 1,000 employees) pursued self-insurance. This size allowed accurate predictions of annual costs. The advent of partial self-insuring alternatives (e.g., stop-loss, minimum premiums, and retrospective premium agreements), however, have made self-insurance an option for smaller firms. These

mechanisms protect small employers from the financial risk of unexpectedly high health care expenses.

Scope of Coverage

The rise in health care costs and insurance premiums has caused some employers to place closer scrutiny on the scope of coverage of employer plans. A number of plans have reduced or placed limits on benefits for certain services for which utilization is difficult to control, such as mental health services. At the same time, some groups have argued that private insurance should cover preventive care and on-going maintenance as a way of reducing the acute care health needs. The scope of health insurance coverage is a controversial issue which affects individuals with specific conditions, providers of services and the employers who finance this coverage.

The debate over the scope of coverage is most evident with regard to state mandated benefits. State mandated benefits have been one vehicle for expanding the benefits included in private plans, but some opponents argue that these mandates have increased insurance premiums even further. A list of common state mandated benefits is in exhibit 2. This section examines the issues associated with covering non-acute care services, such as preventive and ongoing maintenance care; it closes with a discussion of mandated benefits.

Preventive Services. During the past 15 years, increasing attention has been paid to the issue of the potential positive impacts—both in terms of improved health and reduced medical care costs—of preventing disease and encouraging healthy behaviors. Society has become increasingly aware that much of the acute care that is consumed can be traced to unhealthy lifestyles and behaviors. Clinical preventive services can be used to protect against disease (i.e., immunizations), to limit its impact (i.e., early detection), and to

EXHIBIT 2

COMMON STATE MANDATED BENEFITS

Mandate	Number of States
Newborns	48
Chiropractors	40
Alcoholism	39
Psychologists	38
Mental/Physical Handicap	34
Conversion Privilege	33
Mammography Screening	33
Optometrists	32
Continuation for Dependents	28
Dentists	28
Mental Health	28

SOURCE: Blue Cross and Blue Shield Association, 1990.

retard its development. Evidence suggests that many of these services are underutilized relative to clinical guidelines, and that most insurance plans do not cover them.

Although aggregate quantitative measures are not available, most experts agree that Americans underutilize preventive care relative to the recommended guidelines of the U.S. Preventive Services Task Force. Woolhandler and Himmelstein compared patterns of preventive care use for 10,000 middle aged women from the National Health Interview Survey.⁶⁵ They found that basic screening for four major illnesses was significantly less

⁶⁵S. Woolhandler, M.D., and D. Himmelstein, M.D., "Reverse Targeting of Preventive Care Due to Lack of Health Insurance." *JAMA*, Vol. 259 (May 1988).

for uninsured women than for those who had insurance. The preventive services include pap tests to detect cervical cancer, blood pressure check-ups, breast exams, and glaucoma tests. For Pap tests, 39 percent of the uninsured had not received adequate screening, compared to 25 percent of the insured. With respect to clinical breast exams, the comparable rates were 50 percent for the uninsured and 36 percent for the insured. Thus, not only were the rates different by insurance status, but rates of inadequate screening were also high for both groups.

In a study using data from the Rand Health Insurance Experiment, Lurie found low levels of use of preventive services, but higher use for those facing lower cost-sharing.⁶⁶ Only 45 percent of infants received timely immunization for DPT and polio. In the three-year experimental period, only 66 percent of women aged 17-44 and 57 percent aged 45-65 received a Pap test, and 2 percent of women aged 45-65 had a mammogram. More women on the free plan (65 percent) received a Pap test than women on a plan with cost-sharing (52 percent). These results suggest that free care alone is an inadequate incentive to achieve recommended utilization of preventive care.

While lack of insurance coverage may be a barrier to use of preventive services, it is also clear that even with insurance coverage the appropriate use of preventive services may not be achieved. This finding suggests that other approaches such as public health information campaigns and direct provision of services are required to encourage utilization of preventive services. Additional research is required on the cost-effectiveness of preventive care in terms of reduced hospitalization in later years.

Rehabilitation and Ongoing Maintenance. Services which are routinely needed by persons with chronic or disabling conditions are often not covered by private insurance plans for the same reasons noted above. While these

⁶⁶N. Lurie, W. G. Manning, Peterson, et. al., "Preventive Care: Do We Practice What We Preach?," *American Journal of Public Health*, Vol. 77 (July 1987), pp. 801-4.

services are predictable and do not fit into the traditional health insurance model, a lack of coverage may lead to secondary illnesses with attendant increases in health care costs. Griss identifies five general service areas which are often inadequately covered:⁶⁷

- **Rehabilitation.** Rehabilitation services include physical therapy, occupational therapy, speech-language and hearing therapy, and counseling. The primary purposes of rehabilitation is to improve functional ability.
- **Maintenance.** Maintenance services include the rehabilitation services above but refer to their being provided on an ongoing or long-term basis. While therapies may be covered for acute episodes of care, they are often explicitly excluded from coverage for maintenance.
- **Personal assistance.** Personal assistance services include personal hygiene, mobility tasks, housework, meal preparation, communication services, and other activities that an individual would normally do if he or she did not have a disability.⁶⁸ Survey of Income and Program Participation (SIPP) data suggest that about 15 percent of working age persons with a work disability need some form of personal assistance services to meet their daily needs.⁶⁹ To the extent that these services are not medically necessary and do not markedly improve the functional capacity of the individual, they are not likely to be covered by insurance.

⁶⁷Griss, Bob. *Access to Health Care*, Vols. 1 and 2, September 1988.

⁶⁸S. Litvak, H. Zukas, and J. Heumann, *Attending to America: Personal Assistance for Independent Living*. (Berkeley: World Institute on Disability, April 1987).

⁶⁹Griss, B. *Access to Health Care*. Vol 1 and 2.

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- **Assistive medical devices.** Like personal assistance, assistive technology is often perceived as convenient rather than medically necessary. As a result, it is often not covered by health insurance. Assistive medical devices include durable medical equipment (such as wheelchairs), prosthetics and orthotics, sensory and communication devices, and seating and positioning aids.
 - **Disposable medical supplies.** Supplies such as catheters and diabetic testing materials are often not covered by insurance.

Some plans have recognized the cost effectiveness of certain benefits which reduce hospitalization. In particular, home health care benefits have grown in popularity among employer plans, covered by 79 percent of employers in 1986 and by 88 percent of employers in 1989.⁷⁰ Unfortunately, the extent of limits on this type of benefit is not well understood or documented.

Advocates argue that the provision of these services would reduce the risk of further acute care episodes, and ultimately slow the increase in health care costs. Insurers argue that coverage of these services would significantly increase insurance premiums because the number of persons who would use these services would far outweigh the benefits from preventing an acute episode for a few persons. More information is required on the costs and benefits of these services.

Mandated Benefits. State mandated benefit requirements have been used to expand access to services for persons with private health insurance. Many of the mandated benefits have been for preventive or rehabilitation services. A number of states have passed mandated benefit laws to ensure that health insurance policies contain certain types of services. Reflecting the growing interest in preventive care, for instance, many States have recently required

⁷⁰Foster Higgins, *Health Care Benefits Survey, 1989, Report 2, Indemnity Plans: Cost, Design, and Funding*, 1990.

insurers to cover cancer screening (e.g., mammography and Pap tests) and preventive care for young children. Some state mandates also specify a minimum level of service which must be covered as part of a benefit. For example, Wisconsin specifies that the services which an insurer must reimburse for diabetes include installation and use of insulin infusion pumps, insulin, and a diabetic self-management education program. California requires that, if an insurance policy covers prescription drugs, it cannot exclude coverage for AZT. Other State mandates specify the types of providers who are eligible to receive reimbursement for the services. Finally, some States require that the protocols developed by professional associations be followed for certain benefits, such as the American Academy of Pediatrics for well-child care and the recommendations of the American Cancer Society for cancer screening.

The most common health insurance mandates are for coverage of psychologists, optometrists, chiropractors, alcoholism treatment, newborn coverage, coverage for mentally and physically handicapped persons as dependents, mammography screening and conversion privileges (exhibit 2). While the majority of States require coverage for alcoholism and mental health services, orthotic and prosthetic devices are required in only five States, and prescription drugs and long-term care are required in only three States. Some States mandate home health care only for persons who have been discharged from a hospital, while at least one State has mandated home health care as an alternative to hospitalization. No States have mandated home care on a maintenance basis.

Mandated benefits pose a number of problems, however. Critics of mandated benefits argue that the mandates create incentives for employers to self-insure since the number and types of benefits affects the price of insurance and ERISA exempts self-insured plans from state mandates. The Health Insurance Association of America found that mandated benefits contribute

15-20 percent to the cost of health insurance premiums.⁷¹ The extent to which eliminating mandates would help lower premiums is uncertain, however, given that annual percentage increases in premiums for employers have been 15-25 percent.

Reassessment of Retiree Health Benefits

Employment-related retiree health benefits are a major source of medical coverage for retirees under age 65 and play an important role in providing supplemental Medicare coverage to retirees age 65 and over. Post-retirement health benefits (PRHB) have become a major concern for companies as retiree medical expenses continue to rise due to medical inflation, an aging population, earlier retirement, and longer life spans. In 1988, employers paid \$9 billion for health care coverage for about 7 million retirees and their dependents. Assuming no change in coverage, companies annual retiree health expenses will equal \$39 billion (in constant 1988 dollars) by 2020.⁷²

Overview of Retiree Health Benefits. PRHBs became popular with the establishment of Medicare in 1965. Since Medicare did not cover all of the elderly's health care costs, businesses began to supplement Medicare coverage for retirees. The high ratio of employees to retired workers and the relatively low cost of medical care made it financially feasible for employers to consider retiree health benefits.

When companies began offering retiree health benefits, working age Americans outnumbered the elderly population by almost six to one. This high ratio reflected the large number of workers across which employers were able to spread the health costs of a few retirees. In the 30 years since then, the ratio has dropped to four to one. By 2030, the ratio is expected to

⁷¹Health Insurance Association of America, *The Price of State Mandated Benefits*, July 1989.

⁷²U.S. General Accounting Office, *Employee Benefits: Extent of Companies' Retiree Health Coverage*, March 1990.

be two to one.⁷³ As the demographics shift, many companies will face difficulty financing retiree health benefits.

Only four percent of employers offer retiree health benefits, yet these 105,000 companies employ 40 percent of the private sector workforce and cover over five million retirees.⁷⁴ Firms providing retiree health benefits tend to be larger companies; almost three fourths of the workers eligible for retiree health benefits are employed by companies with at least 100 employees.⁷⁵ Over half of firms offering retiree health benefits do so regardless of retiree age; another 20 percent offer these benefits only to retirees under age 65.⁷⁶

Source of Retiree Health Coverage. Almost one-half of all retirees have employment-related health insurance.⁷⁷ Not surprisingly, the overwhelming majority of these retirees obtained employment-related coverage from previous rather than current jobs. Retirees under age 75, males, and non-minority groups are more likely to have this coverage. Also, retirees previously employed in the public sector, manufacturing industries, or in transportation, communication, or utilities, are the most likely to have coverage. Those who worked in agriculture, personal services, and sales industries are the least likely to have PRHBs. Retirees from the South are also less apt to have employer-related retiree coverage than retirees from other regions of the country.

⁷³*Ibid.*

⁷⁴*Ibid.*

⁷⁵*Ibid.*

⁷⁶*Ibid.*

⁷⁷A. Monheit and C. Schur, "Health Insurance Coverage of Retired Persons," *NMES Research Findings 2*, National Center for Health Services Research, September 1989.

GAO estimates that 29 percent of the 7 million retirees receiving employer-related health benefits in 1988 were under the age of 65.⁷⁸ Yet these early retirees accounted for about 58 percent of total benefit costs. Retirees under 65 lack Medicare coverage and are therefore more costly for employers to cover.

One-third of retirees over age 55 have private coverage from a non-employer source.⁷⁹ White, female, and older retirees are more likely to rely on non-employer private health insurance. According to a 1989 HIAA Survey, 45 percent of the elderly with non-employer coverage obtained policies through other groups or associations and another 45 percent purchased policies directly from an insurance company.⁸⁰ The remaining 10 percent obtained coverage through the mail or with HMOs.

Almost one-fifth of retirees have no private health insurance coverage of any kind.⁸¹ Black, Hispanic, and divorced/separated retirees are much more likely to lack private health coverage. Of particular concern are the estimated 900,000 retirees under age 65 that lack both public and private health insurance.

Employer Response to Increasing Retiree Health Costs. Despite fears to the contrary, less than 1 percent of companies have terminated a PRHB plan in the past 5 years and less than 5 percent with current retiree health plans indicate that they are likely to do so.⁸² Another four percent of companies with PRHBs are considering eliminating coverage for dependents of retirees.

⁷⁸U.S. General Accounting Office, *Employee Benefits: Extent of Companies Retiree Health Coverage*.

⁷⁹A. Monheit and C. Schur, "Health Insurance Coverage of Retired Persons."

⁸⁰T. Rice, J. Desmond, and J. Gabel, *Older Americans and Their Health Care Coverage*, Health Insurance Association of America, October 1989.

⁸¹A. Monheit and C. Schur, "Health Insurance Coverage of Retired Persons."

⁸²U.S. General Accounting Office, *Employee Benefits: Extent of Companies' Retiree Health Coverage*.

However, many employers are attempting to limit retiree health expenses by increasing retiree cost-sharing requirements, and restructuring or reducing benefits.⁸³ Between 1984-1988, all 29 Chicago area companies surveyed by the GAO increased retiree cost-sharing provisions for both overall coverage and services received. One company even decided to phase out retiree health coverage by not offering it as a benefit for new retirees. Similarly, General Motors has increased copayments and deductibles for fee-for-service plans to encourage retirees to enroll in managed care plans and Ralston Purina is phasing out its retiree health insurance and expanding its company-sponsored savings plan.⁸⁴

According to the 1988 HIAA-Johns Hopkins study of 1,665 employers, almost 40 percent of the companies that currently pay part of retiree health premiums will require retirees to pay more of the premiums in the future. Another 16 percent expect to require retirees to pay the full cost of their group-rate health premiums. Similar changes are anticipated in spousal and dependent PRHB coverage within these firms.

In the same HIAA-Johns Hopkins study, one-third of employers offering PRHBs plan to increase deductibles and copayments for retirees.⁸⁵ Almost 40 percent of firms not currently offering managed care plans for retirees indicated that they were planning or considering doing so. Thirty percent of respondents are also at least considering increasing the minimum number of years of service necessary for PRHB eligibility.

Among other options reported to be considered by some employers to reduce retiree health benefits are: (1) changing retiree health obligations to a defined contribution as opposed to a defined benefit plan, (2) vesting retiree health

⁸³*Ibid.*

⁸⁴S. DiCarlo, J. Gabel, G. deLissovoy, and J. Kasper, *Facing Up to Postretirement Health Benefits*, Health Insurance Association of America, September 1989.

⁸⁵*Ibid.*

benefits, and (3) establishing "flexible benefit programs" which allow retirees to select from a variety of acute and long-term care health plans with employer subsidies depending on years of employment and other service-related factors.⁸⁶

⁸⁶U.S. General Accounting Office, *Employee Benefits: Extent of Companies' Retiree Health Coverage*.



PUBLIC HEALTH INSURANCE

Through the creation of the Medicare and Medicaid programs, the Federal Government became a major payer for health services in the United States. While private health insurance remains the primary source of health care financing for most Americans and States and localities traditionally have accepted and continue to accept large responsibility for the public health of area residents, the enactment of Medicare and Medicaid resulted in an important shift of the burden of health care financing to the Federal Government. Both Medicare and Medicaid were established to cover populations considered unable to obtain private health insurance to meet their needs. While Medicare was adopted as a means of providing medical care to all the elderly at Federal expense, Medicaid was originally conceived as an extension of existing cash welfare programs, but providing medical care instead, financed jointly by State and Federal revenues.

Since their enactment in 1965, these public programs have grown dramatically in size and scope, today providing coverage to about 58 million persons. In fiscal year 1989, Federal Medicare benefit payments and Medicaid medical assistance payments accounted for about 11 percent (\$120 billion) of the total Federal budget, and from 1970 to 1988, Medicare and Medicaid payments as a percentage of total personal health care expenditures increased from 18.9 to 40.6 percent.⁸⁷

The role of public insurance in meeting the Nation's health care needs has received renewed interest as the problems of access to care and rising health care costs have intensified. Questions are being raised about how these programs can be reformed to meet future health care needs. This paper

⁸⁷ U.S. Department of Health and Human Services, Health Care Financing Administration, *1990 HCFA Statistics*, September 1990.

presents an overview of the Medicare and Medicaid programs and discusses their limitations.

Medicare

Medicare is the national health insurance program for the elderly and certain persons with disabilities. The Medicare program is the largest public health insurance program in the United States, providing health care coverage to over 33 million people. As the single largest payer of health care, the Medicare program is perceived as the standard-bearer for other payers in the health system, particularly in the area of provider reimbursement, and often serves as a model for a national health program.

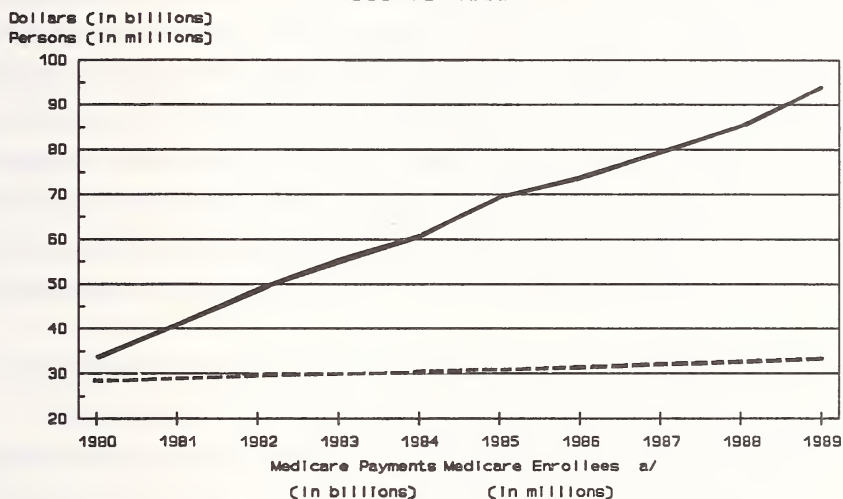
Medicare was established in 1965 by Title XVIII of the Social Security Act to finance health care for the elderly. The 1972 amendments to the Social Security Act extended Medicare eligibility to certain persons with disabilities and to most persons with end-stage renal disease (ESRD).

Medicare is divided into two parts: Part A, the hospital insurance program, and Part B, the supplementary medical insurance program. Part A covers inpatient hospital, skilled nursing facility, and home health services, while Part B provides coverage for most physician's services, laboratory tests, and outpatient hospital care.

About 95 percent of the Nation's elderly are enrolled in the hospital insurance program, and almost all of these are also enrolled in Part B. When Medicare became operational on July 1, 1966, 19.1 million persons older than 65 were enrolled. By July 1, 1989, the number of enrollees had increased to approximately 33.6 million, including 3.3 million disabled

enrollees.⁸⁸ Medicare expenditures have increased at a much faster rate than the number of enrollees. In 1980 Medicare benefit payments were \$33.9 billion, and by 1989 Medicare benefit payments were estimated to be \$94.2 billion, almost three times higher (exhibit 1).⁸⁹

EXHIBIT 1
MEDICARE BENEFIT PAYMENTS AND ENROLLEES,
1980 TO 1989



a/ Medicare Part A Enrollees as of July 1.

SOURCE: Health Care Financing Administration, 1990 HCFA Statistics.

Eligibility

Current Eligibility. All persons older than age 65 who receive Social Security benefits are automatically eligible for Part A coverage. Persons older than age 65 who do not receive Social Security benefits may enroll in

⁸⁸ Health Care Financing Administration, 1990 HCFA Statistics.

⁸⁹ *Overview of Entitlement Programs: 1991 Green Book; Background Material and Data on Programs with Jurisdiction of the Committee on Ways and Means*, Committee Print, House Committee on Ways and Means, 102 Cong. 1st Sess., (Government Printing Office, 1990).

the program by paying a monthly premium of \$177 (as of January 1, 1991). Persons younger than age 65 who receive Social Security benefits on the basis of disability are also eligible for Medicare Part A after a 2-year waiting period. Most people who have end-stage renal disease and require a kidney transplant or renal dialysis are eligible for Part A coverage, regardless of age.

Medicare Part B coverage is voluntary. All persons older than age 65 may enroll in the program. Persons with disabilities or end-stage renal disease who are eligible for Part A may also elect to enroll in the supplementary medical insurance program. Nearly everyone (about 96 percent) covered by Part A also enrolls in Part B. Unlike Part A, Part B requires a monthly premium payment (\$29.90 as of January 1, 1991). This premium represents 25 percent of costs. Federal law now requires States to pay this premium and any other cost-sharing for Medicare beneficiaries with incomes below 100 percent of the Federal poverty line ("Qualified Medicare Beneficiaries").

Limits in Eligibility. Consistent with its original intent, Medicare is primarily a health care coverage program for the elderly and disabled; children, and children with disabilities in particular, cannot obtain Medicare coverage except in cases of chronic kidney disease. Extension of eligibility for persons with end-stage renal disease (ESRD) was later added to the program.

Persons with disabilities who receive cash benefits under the Social Security disability insurance (SSDI) program may also receive Medicare coverage after satisfying an additional 24-month waiting period after an initial 5-month waiting period for SSDI benefits to commence. Congress included the 24-month waiting period in order to keep program costs within reasonable bounds and avoid overlapping private insurance protection. Many beneficiaries may go without any type of health insurance during this waiting period. A study of the impact of eliminating the waiting period reports that 27 percent of SSDI recipients had no health insurance during months 18-24

of the waiting period.⁹⁰ An analysis of data from the Social Security Administration Continuous Disability History file found that as many as 55 percent of SSDI beneficiaries with cancer do not survive the 2-year waiting period.⁹¹

The continuation coverage provision in the Consolidated Omnibus Budget Reconciliation Act (COBRA) of 1986 requires employers to make their insurance plans available at group rates for up to 18 months for various classes of persons who lose coverage through loss of work. In OBRA 1989, Congress lengthened the COBRA continuation period for certain individuals from 18 months to 29 months for employment-related health insurance to correspond with the waiting period for Medicare coverage. The extension from 18 months to 29 months applies only to employees who become eligible for SSDI or SSI on the basis of a disability which they had when they terminated employment.

Covered Services

Medicare was intended to meet the acute care needs of the elderly and persons with disabilities. Services covered under Medicare are provided by Parts A and B in a complementary fashion.

Current Covered Services. Benefits provided under Part A of Medicare include the following services.

Hospital inpatient care. Medicare will pay for all reasonable expenses for the first 60 days, after a deductible has been paid in each benefit period (\$628 for calendar year 1991). For days 61-90, a coinsurance amount is

⁹⁰ Barry Bye and Gerald F. Riley, "Eliminating the Medicare Waiting Period for Social Security Disabled-Worker Beneficiaries," *Social Security Bulletin*, Vol. 52 (May 1989), pp. 2-15.

⁹¹ James Lubbitz and Penelope Pine, "Health Care Use by Medicare's Disabled Enrollees," *Health Care Financing Review*, Vol. 7 (Summer 1986).

required (\$157/day). When more than 90 days of inpatient care are required, a beneficiary may rely upon a "lifetime reserve" of 60 additional hospital days. A coinsurance amount is required for each reserve day.

Skilled nursing facility care. Medicare covers up to 100 days in a skilled nursing facility (SNF) for persons requiring skilled nursing care and/or skilled rehabilitation services on a daily basis. A beneficiary is eligible for SNF benefits only after a 3-day hospitalization at minimum and only if the transfer to an SNF occurs within 30 days after a hospital discharge. For the first 20 days, patients pay no coinsurance. The remaining 80 days require a daily coinsurance amount.

Home health care. Part A will cover home health visits provided to persons who need skilled nursing care, physical therapy, or speech therapy on an intermittent basis. Both Part A and Part B include home health benefits, and when a beneficiary is enrolled in both programs, home health services are covered under Part A. As a result, 95 percent of the home health visits provided under Medicare are provided under Part A.

Hospice care. Medicare will pay for hospice care services provided to terminally ill beneficiaries with a life expectancy of 6-months or less up to a 210-day lifetime limit. A subsequent period of hospice coverage beyond the lifetime limit is allowed if the beneficiary is recertified as terminally ill. Medicare beneficiaries do not pay deductibles under the hospice benefit. Copayments may be collected for only two items: outpatient prescriptions for drugs and medications to manage symptoms and relieve pain and a percentage of the cost of inpatient respite care.

Currently, Medicare Part B pays for 80 percent of the lesser of the customary, prevailing, and reasonable charge for covered services once an annual deductible has been met. However, OBRA 89 included a fundamental restructuring of Medicare physician reimbursement. Under this reform,

scheduled to be effective as of January 1, 1992, physicians will be reimbursed on the basis of a Medicare fee schedule. The fee schedule will apply to all physicians' services with the exception of clinical diagnostic tests and other items specified by the Secretary of HHS. Services covered under Part B supplement those covered under Part A and include the following services.

Physician services. Medicare pays for physician services, including surgery, consultation, and home, office, and institutional visits. Certain limitations apply for services rendered by dentists, podiatrists, and chiropractors and for the treatment of mental illness.

Other medical and health services. Part B-covered services include laboratory and other diagnostic tests; X-ray and other radiation therapy; outpatient services at a hospital; rural health clinic services; home dialysis supplies and equipment; artificial devices (other than dental); physical and speech therapy; and ambulance services.

Home health services. Medicare Part B will cover an unlimited number of medically necessary home health visits for persons not covered under Part A. There is no coinsurance or deductible to the beneficiary for these services.

Service Coverage Limitations. The Medicare program does not provide coverage for all the health care needs of the elderly and persons with disabilities. Medicare does not cover preventive or wellness care such as routine physical exams and tests, eyeglasses or hearing aids, routine foot care, or immunizations. Medicare will often not pay for ongoing maintenance services and does not cover outpatient prescription drugs. The Medicare Catastrophic Coverage Act of 1988 would have required Medicare to pay 50 percent of the cost of prescription drugs after out-of-pocket expenses of \$600. This cost-sharing amount would have increased in later

years. The Congress, however, repealed this part of the Act before it was implemented.

Medicare Part B covers certain durable medical equipment and supplies. Medicare will pay for prosthetic devices, including pacemakers, colostomy and ileostomy bags, artificial limbs and eyes, and braces for an arm, leg, back, or neck. Medicare will also pay for durable medical equipment such as wheelchairs. While some assistive devices are considered durable medical equipment, some that have come into existence since 1965 through advances in medical technology are not covered. DME coverage is limited to that specified under an HCFA fee schedule and does not include hand rails and grab bars, sensory aids, and communication devices.

Medicare does not cover intermediate or long-term nursing home care and only provides limited nursing home care in skilled-care facilities following hospital stays. Medicare fully covers the first 20 days of an SNF stay following hospitalization and then requires large copayments for days 21-100. No benefits are provided after the 100th day.

Medicare beneficiaries may be liable for the difference between the physician's charge and the Medicare-approved reimbursement (balance billing). Increases in balance billing amounts have been a growing concern for beneficiaries. Total balance billing charges by physicians in 1987 were almost five times as high per beneficiary as a decade earlier.⁹² The recently enacted Medicare Fee Schedule should reduce beneficiary out-of-pocket liability by limiting balance billing to 115 percent of the fee schedule amount when the system is fully phased-in.

As a result of these gaps in coverage, a majority of Medicare beneficiaries have supplemental insurance policies that provide for services not covered by

⁹² Physician Payment Review Commission: *Annual Report to Congress*, March 1988.

Medicare, although these policies do not typically cover long-term care. About 70 percent of elderly Medicare beneficiaries have some type of private insurance to fill gaps in Medicare coverage.⁹³ Of those with supplemental policies, about 40 percent obtain their policies through an employer or former employer.⁹⁴ Some beneficiaries with incomes below 100 percent of poverty are eligible for qualified Medicaid benefits, where Medicaid pays Medicare premiums, copayments, and deductibles, but does not cover non-Medicare services. However, for those Medicare beneficiaries who are also eligible for Medicaid (i.e., they are receiving SSI or have obtained eligibility by spending down under a medically needy program), Medicaid serves as "wrap-around" coverage, paying for those non-Medicare services which are covered by Medicaid.

Reimbursement

Under Medicare, hospitals and physicians are reimbursed according to federally derived fee schedules. Since its inception, Medicare had paid hospitals the "reasonable costs" of providing services to Medicare beneficiaries. Under this system, reasonable costs were determined retrospectively. In 1983, however, in an effort to provide hospitals with an incentive to control costs, a prospective payment system (PPS) was implemented. With PPS, Medicare payments are determined prospectively and are made on a per discharge basis. All discharges are classified into clinically homogenous groups known as diagnosis-related groups (DRGs). Payment for each DRG reflects the relative resources used for furnishing inpatient services to that classification of (Medicare) cases. Hospitals are paid these predetermined amounts regardless of actual costs incurred, with the exception of some outliers.

⁹³ Lewin/ICF analysis of the 1984 Survey of Income and Program Participation matched to the 1989 Consumer Expenditure Survey.

⁹⁴ P.F. Short and A.C. Monheit, "Employers and Medicare as Partners in Financing Health Care for the Elderly," National Center for Health Service Research, December 1987.

Until 1991, Medicare PPS excluded capital-related costs and costs of direct medical education from the prospective payment. HCFA recently released the final Medicare capital rules for incorporating hospital capital costs into PPS effective October 1, 1991. Payment for these costs is on a reasonable cost basis. In addition, certain hospitals—psychiatric, long-term care, children's, and rehabilitation—are excluded from PPS.

Under PPS, certain hospitals are eligible for additional payment. Hospitals that have interns and residents in an approved graduate medical education program receive additional payment for the indirect costs of medical education. Additional payment is also made to hospitals that serve a disproportionate share of low-income patients.

Traditionally, Medicare has paid physicians on the basis of their historical charges, through a method known as customary, prevailing, and reasonable (CPR). Under this system, payment for a service is determined by the amount the physician has charged in the past (customary) and the amount that other physicians in the locality and specialty charge (prevailing). The reasonable, or allowed, charge is the lowest of the actual, customary, or prevailing charge.

This physician reimbursement system has led to distortions in the pattern of relative payment across physician specialties, services, and geographic locations. As a result of these distortions and escalating program costs, OBRA 89 included a major reform of physician payment in the Medicare program. The physician payments reforms consist of four components:

- Replaces the reasonable charge method of determining payment amounts with a resource-based fee schedule in 1992.
- Sets an overall limit on the increase in physician expenditures through Medicare Volume Performance Standards.

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- Limits actual charges to a percentage of the fee schedule amount in 1993 in order to provide protection to beneficiaries.
 - Establishes a program for research on effectiveness of medical services and the development of practice guidelines.

HCFA issued the final rule on November 25, 1991. The fee schedule will become effective on January 1, 1992.

Financing

Current Financing. The Medicare Part A Hospital Insurance (HI) Trust Fund is financed primarily through Social Security payroll tax contributions paid by employers, employees, and the self-employed. In 1990, payroll taxes accounted for 88 percent of HI trust fund's total income. The fund receives other sources of income, including proceeds from the railroad retirement system, reimbursement for certain uninsured persons, and interest earned by the fund. In an effort to raise revenues for the trust fund, OBRA 90 raised the earnings base for payroll taxes for HI above that for social security. For 1991, the payroll tax rate for HI is 1.45 percent up to \$125,000 in earnings. The OASDI earnings base is \$53,400 per employee for 1991. This ceiling increases each year by the rate of increase in average wages. An equal contribution rate is paid by the employer. The balance of the HI trust fund is dependent upon the income to the trust fund exceeding the inpatient hospital expenditures for Medicare benefits and administrative costs.

The Supplemental Medicare Insurance (SMI; Part B) trust funds are financed by premiums paid by Part B enrollees and from general revenues. The premium rate was defined in OBRA 90 to be at 25 percent of the projected program costs for the budget period. For 1991, the monthly premium amount is \$29.90. Federal contributions from general revenues, however, are the major source of income for the SMI trust fund.

Financing Issues. There is concern over the solvency of the HI trust fund, since inpatient hospital expenditures have been rising at a faster rate than income to the fund in recent years. Some projections have suggested that the fund will be depleted early in the next century.⁹⁵ Because it is financed through beneficiary premiums and general revenues, the SMI trust fund is not likely to be exhausted. The rapid rise in health care costs, however, is burdening the SMI trust fund, resulting in higher beneficiary premiums and a larger Federal deficit. While the proposed fee schedule may help constrain the growth in costs to the Medicare program, the costs of the program will increase due to the aging of the population, its increased longevity, and increasing utilization.

Medicare's Role in Reform

Medicare has been proposed as a vehicle for major expansion of health care coverage. The program is generally viewed as a success in terms of its administrative efficiency given its large scale and reimbursement features. However, while held up as a model program, a large expansion of Medicare to cover most Americans raises concerns about a national health insurance system potentially limiting individuals' freedom of choice in selecting health care coverage. In addition, issues have arisen related to the extent of service coverage under Medicare, especially in terms of the adequacy of currently covered services for meeting the health care needs of the eligible population. Expanding Medicare also raises problems because it is an entitlement, rather than a means-tested program. Instead of directly helping those most in need, expanding entitlements aids the poor only at the considerable expense of aiding the middle and upper classes as well. It is clear that major expansions of Medicare would require a reassessment and potential realignment of the program's purpose and the potential role of government as a single and/or primary payer of health care.

⁹⁵ The Board of Trustees, Federal Hospital Insurance Trust Fund, *1991 Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund*. Presented on May 17, 1991, pp. 1-62.

Medicaid

Title XIX of the Social Security Act provides for a program of medical assistance for certain individuals and families with low incomes. The program, known as Medicaid, became law in 1965 as a jointly funded cooperative venture between the Federal and State governments. Federal oversight responsibility for the Medicaid program lies with the Health Care Financing Administration (HCFA) in the Department of Health and Human Services (DHHS). Within broad, federally established guidelines, each State determines (1) eligibility requirements; (2) the amount, duration, and scope of services; (3) the rate of reimbursement for services; and (4) administrative practice. As a result, Medicaid programs vary considerably among States.

In 1990, the Medicaid program provided services to some low-income persons (about 25 million) who were (1) families with dependent children; (2) pregnant; (3) aged; (4) disabled; or (5) blind. The combined Federal and State payments for the Medicaid program for FY 1989 in constant 1990 dollars was \$57.2 billion (approximately 56.5 percent Federal and 43.5 percent State monies) (exhibit 2).⁹⁶ Since 1967, the number of persons enrolled in Medicaid increased about 150 percent.⁹⁷

In recent years, program expansions have permitted a larger group of low-income children and pregnant women in particular to be eligible to receive Medicaid-funded medical care. As program eligibility has expanded, Medicaid has become the fastest growing part of both the Federal health care budget and those of the States.

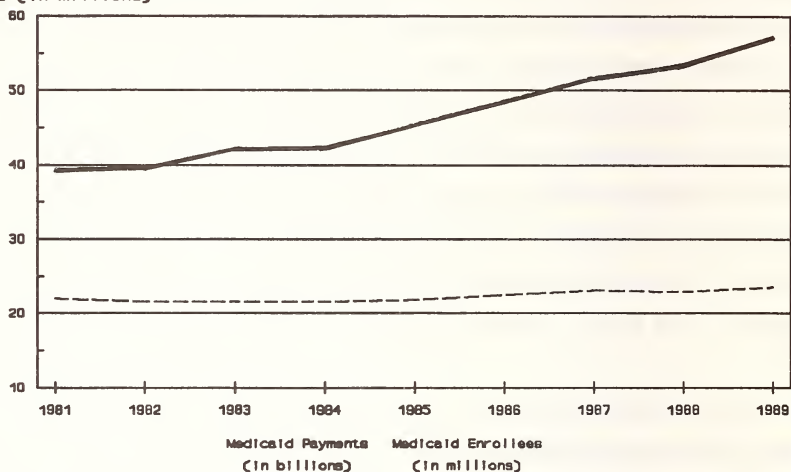
Over time, the Medicaid program has become the major payer of long-term care-services. In FY 1989, the 29 percent of Medicaid recipients who were

⁹⁶ The \$57.2 billion figure does not include capitation premium payments, the State of Arizona, or the smaller territories. Committee on Ways and Means, *1991 Green Book*.

⁹⁷ Health Care Financing Administration, *1990 HCFA Statistics*.

EXHIBIT 2 MEDICAID PAYMENTS AND UNDUPLICATED RECIPIENTS FOR 1981 TO 1989

Constant 1990 Dollars (in billions)
Persons (in millions)



SOURCE: 1991 Green Book, Committee on Ways and Means.

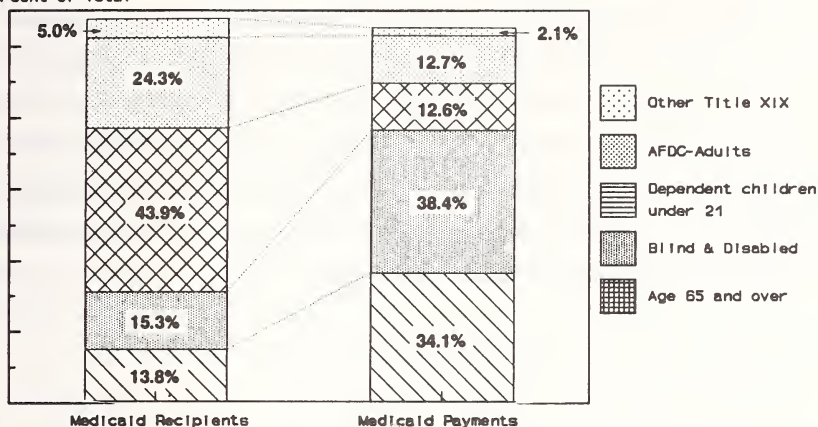
aged, blind, or disabled received \$39.4 billion in services, or \$5,868 per person. In contrast, AFDC adults and children, accounting for 68 percent of Medicaid recipients, received \$13.8 billion in services, or \$860 per person (exhibit 3).⁹⁸ The gap between the elderly and nonelderly has widened: real per capita benefits for the aged, blind, and disabled have risen about 40 percent since 1975, while the real value of Medicaid services for AFDC recipients has fallen about 20 percent.⁹⁹ This section describes the Medicaid program in terms of eligibility, covered services, financing, and provider reimbursement. For each of these issues, the gaps in the program are identified. Finally, the role of Medicaid in health care reform is discussed.

⁹⁸ Henry J. Aaron, *Serious and Unstable Condition: Financing America's Health Care*, The Brookings Institution, 1991, p. 65.

⁹⁹ *Ibid.*

EXHIBIT 3
MEDICAID RECIPIENTS AND PAYMENTS BY
CATEGORY OF ELIGIBILITY, FISCAL YEAR 1989

Percent of Total



NOTE: Recipients do not add to 100 percent since a small number of recipients are in more than one category during the year. Payments do not add to 100 percent due to rounding.

SOURCE: Health Care Financing Administration, BDMS, OSDM, Division of Medicaid Statistics, 1991.

Eligibility

Within Federal guidelines, States generally have broad discretion in determining which groups their Medicaid programs will cover. While States must provide coverage for certain groups of low-income persons, coverage of other groups is optional.

Current Eligibility Requirements. The Medicaid program does not, and was never intended to, cover all the poor. Medicaid eligibility is largely determined by three factors: (1) categorical requirements (i.e., family composition or demographic characteristics); (2) income standards; and (3) assets and resources. Until recently, Medicaid eligibility was based primarily on eligibility for two Federal subsidized cash-assistance programs: Aid to Families with Dependent Children (AFDC) and Supplemental Security Income (SSI). Persons meeting the categorical and income eligibility

requirement for these programs are also eligible for Medicaid coverage. However, changes in Federal law since 1986 have allowed States to decouple Medicaid eligibility from cash assistance for certain populations. Coverage of some of these groups, such as pregnant women and children under age 6 in families with incomes below 133 percent of poverty, is now required; for others, such as pregnant women and infants in families with incomes between 133 percent and 185 percent of poverty, coverage remains optional to the States. States were also given the option (through the Omnibus Budget Reconciliation Act of 1986) of dropping the asset restrictions from eligibility determination for pregnant women and children.

The **mandatory** Medicaid eligibility groups include:

- Recipients of Aid to Families with Dependent Children (AFDC) (single parent families in which a parent is absent, deceased, or incapacitated) and AFDC-UP (two-parent families in which one principal earner is unemployed or has a recent history of employment). These groups are also eligible for a limited extension (12 months) of Medicaid benefits when AFDC is lost due to increased earnings from work.
- Supplemental Security Income (SSI) recipients, (or a subset of aged, blind and disabled individuals in States that apply more restrictive eligibility requirements). Many of these persons are also eligible for Medicare. For these "dual eligibles," Medicaid supplements Medicare by providing certain health care services that are not provided under Medicare, such as long-term care and prescription drugs.¹⁰⁰
- Pregnant women, infants, and children up to age 6 whose family income is below 133 percent of the Federal poverty level (FPL).

¹⁰⁰ State Medicaid programs must also pay Medicare premiums, copayments and deductibles for Medicare beneficiaries with incomes below 100 percent of poverty (Qualified Medicare Beneficiaries).

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- Children age 6 to 19 born after September 30, 1983, in families with incomes below 100 percent of the Federal poverty level.
 - Recipients of adoption assistance and foster care under Title IV-E of the Social Security Act.

States also have the option to provide Medicaid coverage for other "categorically needy" groups. These optional groups share characteristics of the mandatory groups, but the eligibility criteria are somewhat more liberally defined. The broadest **optional** groups that States may cover under the Medicaid program include:

- Infants up to age 1 and pregnant women not covered under the mandatory rules whose family income is at or below 185 percent of the Federal poverty level (the percentage to be set by each State).
- Aged, blind, or disabled adults who have incomes above those requiring mandatory coverage but below the Federal poverty level.¹⁰¹ This option permits the State to provide full Medicaid benefits to this group or supplement coverage for those who are dually eligible for Medicare.
- Institutionalized individuals with income and resources below specified limits.
- Persons receiving care under home and community-based waivers.

¹⁰¹ In most States, the income eligibility level for SSI and thus Medicaid is below the Federal poverty level. As a result, aged, blind, and disabled persons who satisfy SSI program criteria for age, blindness, or disability but have incomes and resources above the SSI limits are not eligible for Medicaid. This option allowed States to extend coverage to some members of this group with incomes above the SSI limit but below 100 percent of poverty.

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- Medically needy persons. The "medically needy" are persons who meet the categorical eligibility criteria of one of the groups defined above but not the income or resource eligibility criteria. Under the optional medically needy program, these persons can qualify for Medicaid in one of two ways:
 - Their income is between the AFDC payment standard and the State-established medically needy standard (up to 133.3 percent of the State's AFDC payment standard) and they meet the medically needy resource standard (generally the highest resource standard used for the comparable categorically needy group or the highest standard for all categorically needy groups if the State uses only one resource standard).¹⁰²
 - Through "spend down," a process whereby incurred medical expenses are subtracted from family income. If the resulting net income is below the medically needy standard, then the family becomes eligible for Medicaid (provided they also meet the asset test).

If a State elects to have a medically needy program, it is required at a minimum to provide coverage to certain children younger than age 18 and pregnant women. As of January 1991, 38 States (including the District of Columbia) provided Medicaid to at least some groups under a medically needy program.

Some States also have "State-only" programs to provide medical assistance for specified poor persons (such as single adults and childless couples) who do not qualify for the Medicaid program. In addition, States and localities often sponsor direct service programs for low-income persons who may not

¹⁰² Health Care Financing Administration, *Program Statistics: Medicare and Medicaid Data Book*, 1990, March 1991.

be eligible for Medicaid or other insurance. These programs also vary greatly among States. Matching Federal funds are not provided for these State-only programs.

Limits in Eligibility

Although Medicaid was designed to provide access to medical care for certain groups of low-income individuals, it does not cover all of the poverty population. One reason is that AFDC and SSI income standards are well below the poverty line in most States. As of January 1991, the average annualized AFDC income eligibility level was \$5,085, or 45.1 percent of poverty for a family of three, while the medically needy standard was about 56.3 percent of poverty.¹⁰³ Similarly, in 1989, about one-half the States had SSI income levels set at the Federal SSI standard of \$368 per month, or about 68 percent of the Federal poverty level for a disabled person living independently. Only three States had levels exceeding the poverty level as a result of State supplementation payments.¹⁰⁴

Furthermore, few States index AFDC, SSI State supplement, and medically needy eligibility standards for inflation. As a result, while the poverty level has increased annually, most State Medicaid eligibility standards have not, leading to a smaller proportion of the population with incomes below poverty eligible for cash and medical assistance. In 1989, Medicaid covered only about 42 percent of persons with incomes under 100 percent of poverty.

The low-coverage rate of the poverty population is a result of not only the income eligibility levels but also asset restrictions. Within Federal guidelines, asset restrictions vary across States. This proportion may change

¹⁰³ National Governors' Association, "State Coverage of Pregnant Women and Children - January 1991," *MCH Update*, 1991. The average was calculated as a simple arithmetic mean.

¹⁰⁴ M. Rymer Ellwood and B. Burwell, "Access to Medicaid and Medicare by the Low-Income Disabled," *Health Care Financing Review*, 1990 Annual Supplement, pp. 133-147.

as Federal mandates for coverage of pregnant women and children are implemented.

Categorical eligibility requirements also limit access to Medicaid for many persons who meet program income and resource requirements. Persons explicitly excluded from Medicaid include single men and non-pregnant women and couples without children.

Because States have considerable flexibility in determining eligibility standards, where people live makes a difference in whether they are eligible for Medicaid. Income eligibility standards range from 13 percent of poverty in Alabama to 75 percent of poverty in California. States also vary in the optional eligibility groups they cover—not all States have medically needy programs, and only 18 States (as of January 1991) have taken advantage of the opportunity to expand coverage to pregnant women and infants in families with incomes below 185 percent of poverty. While recent Federal Medicaid expansions have shifted some optional categories to mandatory categories, State disparities remain. In addition, State fiscal constraints have caused some States to eliminate coverage of optional groups and/or services. As will be discussed below, service coverage also varies from State to State, and the combination of more liberal eligibility requirements and broader coverage may lead persons to migrate to some States in order to obtain needed services.

In addition to the eligibility limitations which explicitly restrict participation in the program, several other factors effectively constrain coverage. It is widely recognized that not all those eligible for Medicaid enroll. The negative "welfare stigma" associated with Medicaid and the Medicaid eligibility determination process have been identified as factors limiting participation in the program. The eligibility offices may be difficult to access and the application process in most States tends to be lengthy. These factors reportedly discourage many potentially eligible persons from applying for

coverage. Many States have undertaken efforts to simplify the eligibility process. Initiatives include shortening application forms, especially for newly eligible groups who may be ineligible for cash assistance, and placing eligibility workers in sites other than the welfare office, such as public hospitals or health department clinics, to facilitate enrollment of eligible persons. No documented experience has shown whether these initiatives have had an impact.

Incentives for persons to enroll in Medicaid, when they are not eligible for cash assistance, are weak. For example, Medicaid does not provide income, food, or housing—goods considered of greater necessity to many people than health care. Also, many people know they will receive charity care from hospitals or other providers and fail to enroll in Medicaid even though they are eligible. Hospitals, however, have an incentive to assist Medicaid-eligible patients to enroll in Medicaid, since services provided to these persons can then be reimbursed by Medicaid instead of being provided at full cost to the hospital. Finally, those who transition off AFDC often do not know about the availability of an additional 12 months of Medicaid coverage.¹⁰⁵

Covered Services

Similar to eligibility, service coverage is largely determined by the States within Federal guidelines. States have considerable discretion in determining the amount, duration, and scope of all services covered under their Medicaid programs and which optional services will be included.

¹⁰⁵ David T. Ellwood and E. Kathleen Adams, "Medicaid Mysteries: Transitional Benefits, Medicaid Coverage, and Welfare Exits," *Health Care Financing Review*, 1990 Annual Supplement, pp. 119-131.

Current Covered Services

Title XIX of the Social Security Act requires that State Medicaid programs provide certain basic services and comply with any Federal limits on these services in order to receive Federal matching funds. The mandatory services include:

- inpatient hospital services;
- outpatient hospital services;
- prenatal care;
- physician services;
- early and periodic screening, diagnosis, and treatment (EPSDT) services for children under age 21, including services beyond those normally in State plans for conditions identified in the screening examination;
- skilled-nursing facility (SNF) services for individuals aged 21 or older;
- home health care for persons eligible for skilled-nursing services;
- family-planning services and supplies;
- rural health clinic services;
- laboratory and x-ray services;

-
- nurse-midwife services; and
 - certain Federally qualified ambulatory and health-center services.

In addition, States may elect to provide other **optional** services (currently 32 options). States vary considerably in the optional services they provide and in the limitations on those services. The most commonly covered optional services under the Medicaid program include:

- clinic services;
- intermediate-care facility (ICF) services for the aged and disabled;
- ICF services for the mentally retarded (ICFs/MR);
- optometrist services and eyeglasses;
- prescribed drugs;
- prosthetic devices; and
- dental services.¹⁰⁶

Within broad Federal guidelines, States determine the amount, duration, and scope of both the mandatory and the optional services offered under their Medicaid programs. For example, they may limit the number of reimbursable hospital days or the number of physician visits covered. With certain exceptions, a State's Medicaid plan must allow recipients freedom of choice among participating providers of health care. States may provide and

¹⁰⁶ Health Care Financing Administration, *A Statistical Report on Medicaid*, June 20, 1991.

pay for Medicaid services through various prepayment arrangements, such as health maintenance organizations (HMOs).

In general, States are required to provide comparable services to all categorically needy eligible persons. Under two important exceptions, States provide additional services to limited groups as follows: (1) States may request administrative "waivers" under which they offer an alternative health care package for persons who would otherwise be institutionalized under Medicaid. States are not limited in the scope of services they can provide under such waivers so long as they are cost effective. In addition, other than as a part of respite care, they may not provide room and board for such "waivered" recipient. (2) Under the EPSDT program, services identified as needed by eligible children must be provided by Medicaid, even if those services are not included as part of that State's Medicaid plan.

Limits in Service Coverage. While Medicaid is commonly perceived as a comprehensive coverage program, States' flexibility in establishing limitations on amount, duration, and scope of services results in restricted coverage and considerable variation in both mandatory and optional service coverage across States. These differences include a wide range in the number of inpatient hospital days or physician visits covered per person per year, various restrictions on the types of providers available to offer certain services, and coverage of many or few of the 32 optional services available. While limits in amount, duration, and scope of service coverage may help constrain Medicaid program expenditures, these limits also curtail recipients' access to care and place an increased burden on providers who may absorb the cost of providing uncovered services.

Medicaid-covered services consist primarily of acute and long-term care (institutional) services. Provision of most preventive services is optional to States, and provision of care in the home or community-based settings is restricted by waiver conditions (e.g., persons must be at risk of

institutionalization in order to receive certain services in a non-institutional setting, and often only a limited number of "slots" are covered by the waiver). To have a waiver granted, the burden is on States to justify the cost-effectiveness of providing services in alternative settings. These waivers must be renewed periodically.

Furthermore, service coverage may also be constrained by general limits in the availability of services, such as a shortage of physical therapists or nursing home beds. Availability of services also is affected by reimbursement levels. To the extent that reimbursement is not considered "reasonable" by providers, providers may not make certain services available to Medicaid recipients. It is widely acknowledged that private pay patients generally are preferred to others—particularly Medicaid patients—because private patients pay higher rates (reimbursement is discussed further below).

Reimbursement

Current Reimbursement. Medicaid operates as a vendor payment program. States pay the providers of medical services for care rendered to eligible individuals. Providers must accept the Medicaid reimbursement level as payment in full. Payment rates must be sufficient to enlist enough providers so that Medicaid care and services are available under the plan at least to the extent that such care and services are available to the general population in that geographic area. However, low reimbursement rates contribute, in part, to low provider participation in Medicaid. Also, States must augment payments to qualified hospitals that provide inpatient health care services to a disproportionate number of Medicaid recipients and/or other low-income persons.

States have broad discretion in determining the reimbursement methodology and resulting rates for services, subject to Federal upper limits, with three exceptions: (1) for institutional services, payments may not exceed Medicare

reasonable-cost payment rates; (2) for hospice care services, States must pay Medicare rates; and (3) for Federally Qualified Health Centers, reimbursement must be based on the Medicare Principles of Reasonable Cost Reimbursement or 100 percent of reasonable cost.

States may impose nominal deductibles, coinsurance, or copayments on some Medicaid recipients for certain services. Emergency services and family planning services must be exempt from such copayments by recipients. Certain Medicaid recipients must be excluded from all cost-sharing requirements, including pregnant women, children younger than age 18, hospital or nursing-home patients who are expected to contribute most of their income to institutional care, and categorically needy HMO enrollees.

Reimbursement Issues. Low rates of physician participation in Medicaid has been attributed, at least in part, to low reimbursement rates. Some States have made provisions to improve service reimbursement for certain services or providers to encourage provider participation; however, recent fiscal crises in many States may preempt raising Medicaid reimbursement rates.

A survey conducted by the Physician Payment Review Commission (PPRC) and the National Governors' Association (NGA) in 1990 found wide variation in Medicaid physician fees across States and in the levels of fees relative to other payers.¹⁰⁷ In general, Medicaid fees were found to be about 66 percent of Medicare prevailing charges, varying by service and by State.¹⁰⁸ The ratio of Medicaid fees to those of private insurers is still lower given that Medicare-allowed charges are only a percentage of what is paid by Blue Cross/Blue Shield and other insurers.

¹⁰⁷ A. Schwartz, D.C. Colby, and A. Lenhard Reisinger, "Variation in Medicaid Physician Fees," *Health Affairs*, Spring 1991, pp. 131-139.

¹⁰⁸ *Ibid.*

As noted above, these low reimbursement rates have contributed to physicians' reluctance to offer some services or to serve Medicaid recipients at all. However, the extent of the impact of reimbursement rates on access for some service is difficult to isolate. For nursing home care, for example, empirical studies have not consistently shown a positive relationship between the level of the Medicaid rate and access to care.¹⁰⁹ One suggested explanation for this relationship, in part, is the general shortage of nursing home beds due to high occupancy rates; even if payment rates are increased, there is no service available. This example illustrates the complexity of Medicaid program components which affect access to care for recipients.

The combination of low reimbursement rates, paperwork, and payment delays associated with obtaining reimbursement also have contributed to physicians' reluctance to participate in the Medicaid program.¹¹⁰ Limited physician participation can act as an effective constraint on Medicaid recipients' access to care.

Recent attention directed at Medicaid reimbursement issues has focused on hospital reimbursement. The Boren Amendment, enacted with respect to nursing homes in 1980 and extended to hospitals in 1981, permitted States to establish their own payment systems provided the resulting rates were reasonable and adequate to meet the costs incurred by efficiently and economically operated facilities.¹¹¹ The Boren Amendment further requires that rates for hospitals must also be sufficient to assure reasonable access to inpatient services of adequate quality.¹¹² As the result of a 1990 Supreme Court ruling (*Wilder vs. Virginia Hospital Association*), which held that under the provisions of the Boren Amendment hospitals could seek Federal

¹⁰⁹ Lewin/ICF *Synthesis of Medicaid Reimbursement Options for Nursing Home Care*, Draft report submitted to HCFA, January 21, 1991.

¹¹⁰ K.E. Thorpe, J. Siegel, and T. Dailey, "Including the Poor: The Fiscal Impacts of Medicaid Expansion," *Journal of the American Medical Association*, Vol. 261 (1989):1003-1007.

¹¹¹ Committee on Ways and Means, 1991 *Green Book*.

¹¹² *Ibid*.

court review of State reimbursement levels, several State hospital associations or other hospital representatives have filed suit alleging inadequate Medicaid hospital payment. These challenges are likely to continue as hospitals find their ability to cost-shift increasingly curtailed, threatening their financial liability.

Financing

Current Financing. Medicaid is funded jointly by the Federal and State governments. States typically budget funds for the Medicaid program out of general revenues, although some States require local governments to contribute revenues to Medicaid.

The Federal medical assistance percentage portion of Medicaid expenses, to be paid by the Federal Government, is determined annually for each State by a formula that compares a State's average per capita income level with the national average. The matching rate percentage ranges from a minimum of 50 percent to 83 percent. In 1989, the weighted average matching rate was 56 percent, with the wealthier States receiving a lower percentage. Program administrative costs are shared by the Federal Government at 50 percent, although the rate may be higher for certain activities. The amount of total Federal outlays for Medicaid has no set limit (cap). Rather, the Federal Government must match whatever each State decides to provide, within the law, for its eligible citizens.

Financing Issues. The increase in eligible populations and rising health care costs have contributed to large increases in State Medicaid budgets. The National Conference of State Legislatures recently reported that Medicaid spending outpaced all other State spending categories in FY 1991, growing 23 percent.¹¹³ This growth has strained State budgets, and without

¹¹³ Faulkner and Gray, *Medicine and Health*, Vol. 45 (August 25, 1991).

comparable growth in State revenues, States are finding it necessary to institute program cutbacks, including reductions in benefits and eligibility.

Program financing may be further affected by recently proposed rules that would limit States' ability to use monies for the State Medicaid share obtained through funds donated from providers and through revenues from provider-specific taxes. The proposed regulations stem from a Federal concern that the current provisions have effectively permitted States to increase the Federal contribution without an increase in either State expenditures or services. Under the proposed rules, the amount of funds donated from Medicaid providers would be offset from Medicaid expenditures before the amount of Federal financial participation in Medicaid is calculated. While this provision may help constrain the Federal contribution to Medicaid in some States, it will require some States to seek alternative funding sources and could cause States to make program cutbacks for lack of other available resources.

Medicaid's Role in Reform

As the debate on health care reform has intensified, both the Federal and State governments have viewed Medicaid expansion as a major way to expand access to care to the uninsured. The appeal of Medicaid expansions is evidenced by the recent Federal initiatives to expand eligibility as well as State interest in including optional eligibility groups and services in their programs. States initially viewed Medicaid expansions as a means of expanding coverage by leveraging Federal dollars.

Recent State fiscal constraints have reversed this trend as States are now focusing on efforts to reduce Medicaid expenditures. Widespread expansion of eligibility and/or services is unlikely in the near term. Instead, States are focusing on cost-containment strategies that do not reduce access to care. States are limited in the mechanisms available to reduce Medicaid costs,

since they are required by Federal law to cover an expanded population. The Medicaid program offers some specific opportunities for States to test some potential cost-containment strategies, such as alternative delivery arrangements, under Federal waiver provisions. Federally approved waivers permit States to adopt specific care delivery strategies, such as managed care or home- and community-based services, if the State can demonstrate that the service change will be cost-effective. States also may be granted waivers to conduct demonstration projects. These demonstrations are usually authorized by DHHS under general statutory provisions, although recently many have been specifically authorized by Federal legislation. The demonstration projects are typically intended to test the impact of a program improvement, such as changes in service delivery or benefits structures, or extension of eligibility to a population not otherwise eligible for Medicaid or to investigate an issue of interest to HCFA.

Other possible cost-containment strategies that States are exploring include provider payment reform and reductions in the number and scope of services provided. However, some States have found that they must eliminate optional eligibility groups in order to bring Medicaid expenditures down. The next decade is likely to emphasize cost containment in Medicaid programs as opposed to large expansions in the program as States and the Federal Government continue to strive for a balance between cost and access.

THE ROLE OF DIRECT-FINANCED SERVICES

In 1987, Federal, State, and local programs paid an estimated \$45 billion for personal health care services other than Medicare and Medicaid.¹¹⁴ Most Americans receive health care services from private health care practitioners paid for through private or public health insurance or out-of-pocket. However, many Americans receive a significant amount of health care from providers who are directly financed by Federal, State and local governments and private foundations to deliver health care to specific populations.

Direct services providers, which include government-owned and operated hospitals and clinics and not-for-profit health centers supported by grant funds, are often the primary sources of health care for persons living in areas where private providers are scarce or for hard-to-serve populations such as the homeless, who otherwise might not seek care. For others, directly provided services complement services not covered by insurance, such as some preventive services, including immunizations and screening tests. Direct service providers also may offer a reliable source of care for insured persons with limited access, such as pregnant Medicaid recipients who may have difficulty locating a private provider willing to serve them. Finally, for some populations such as military personnel and Native Americans, health care may be more easily provided through a direct service system.

The largest direct service programs are sponsored by the Department of Defense for military personnel and the Department of Veterans Affairs (DVA) for veterans. The remaining providers and programs target individuals who are low-income, medically indigent, minority, young, elderly, living in rural areas, and at risk of receiving little or no health care services owing to financial, physical, or sociocultural barriers. In addition, the

¹¹⁴ National Governor's Association, *A Healthy America: The Challenge for States*, 1991.

homeless, persons with AIDS, substance abusers, and others with special health care needs are being specifically targeted by direct service programs. In recognition of their needs, these providers offer a continuum of care, including specific services such as outreach and case management to facilitate access. The provision of services such as outreach, transportation, and counseling often distinguishes direct service providers from their traditional fee-for-service counterparts and enhances their role in improving access to services for many persons with otherwise limited access.

Direct service providers play a major role in serving the uninsured. Contrary to public perceptions, the uninsured do receive a substantial amount of health care. However, about one-third less is spent on health care for the uninsured than the insured. Much of the care they receive is obtained from direct service providers or as charity care from private providers. Given their role in providing care to the uninsured, direct services are often advanced as mechanisms for improving access to care for this population. The ability of many direct service providers to meet the needs of the uninsured and underinsured is constrained by the same funding uncertainties of other major programs targeted toward these populations. Furthermore, the extent to which the capacity of existing direct service providers can be expanded is not clear given that many are already operating at capacity and do not have the person-power or physical plant necessary to accommodate more clients.

The budgets of public direct service programs represented a small proportion of the over \$600 billion spent on personal health care expenditures in 1990. No comparable or comprehensive data are available to provide information on program characteristics, populations served, and the amount of services delivered. As a result, it is difficult to create a complete picture of the full range of existing direct service programs. The direct provision of services may be categorized in two ways: (1) the providers who deliver services and (2) the financing sources for direct services. This paper describes the major

providers and sources of funding for direct services and examines the role of direct services in health care reform.

Direct Service Providers

Direct service providers are best characterized as those who receive public and/or private monies to serve specific populations or who offer a defined set of services. Specific targeted groups include military personnel, veterans, pregnant women, infants, children, the elderly, persons with disabilities, and minorities. Special services include maternal and child health care, substance abuse and mental health services, and immunizations.

Department of Defense Military Health Services System

The purpose of the Military Health Services System (MHSS) is to provide medical support to military personnel in times of war and to provide peacetime health care services to active duty personnel and their dependents. While peacetime health care services are a benefit for DoD beneficiaries, they also serve to maintain military readiness. The MHSS provides health care services not only to active duty families, but also to retirees, dependents of retirees, and survivors of deceased military members. Approximately 9 million beneficiaries are covered by the military health services system. In FY 1990, DoD spent \$13 billion to provide health care services to beneficiaries under the MHSS.

The military health services system comprises 168 hospitals in the United States and at U.S. military installations worldwide. The total bed capacity of these facilities is slightly over 16,000 worldwide. DoD also operated 656 medical clinics and 432 dental clinics, nearly two-thirds of which are located in the United States. Benefits offered by the MHSS do not vary significantly from benefits available through the private sector health care

plans or the Federal Employee Health Benefits Plan (FEHBP). The MHSS benefit includes surgical, medical, psychiatric, hospital care, physician office visits, outpatient drugs, and limited dental and vision care. When services are not available at an MTF, the beneficiary may seek health care services in the private sector. For dependents and retirees, these services are financed through the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) and beneficiary cost-sharing arrangements. For active duty personnel, services not available through an MTF are covered under a supplemental payment program.

Cost-sharing under the MHSS differs from private sector health care plans. DoD beneficiaries do not pay premiums for the health care services they receive under the MHSS. At present, obtaining MTF care requires nominal inpatient out-of-pocket cost-sharing and no deductible, outpatient visit charge, or pharmacy fee. CHAMPUS requires cost-sharing comparable to many private insurance plans.

Department of Veterans Affairs Providers

The Department of Veterans Affairs (DVA) provides medical care to veterans of military service. The DVA operates 172 hospital centers, 126 nursing homes, 32 domiciliaries, and 339 outpatient clinics to offer a range of inpatient, outpatient, and extended care to eligible veterans. The DVA also supports services provided to eligible veterans at non-VA facilities when appropriate care is unavailable at DVA facilities or DVA facilities are not accessible.

Veterans are eligible for DVA medical care if they have been discharged from active service owing to an injury or illness sustained in the line of duty (including illness related to exposure to Agent Orange), have service-connected disabilities, are 65 years or older, and are unable to pay for

medical care.¹¹⁵ Access to care is prioritized as follows: (1) service-connected disabled veterans, (2) veterans in special categories, and (3) needy (as defined by meeting an established income criterion) non-service connected veterans. The DVA provides care to other non-service connected veterans with higher incomes as facilities and resources permit, subject to copayments.

In 1990, about 1.1 million hospital patients and 97,000 nursing home and domiciliary patients were treated at both DVA and non-DVA facilities, and 23 million outpatient visits were provided. The 1990 DVA appropriation for medical programs was \$11.4 billion.¹¹⁶

Indian Health Service

The Indian Health Service (IHS), part of the Public Health Service, is responsible for providing health services to more than 1 million Native Americans and Alaska Natives. The IHS serves persons residing in 12 designated areas that comprise reservations, historic areas of Oklahoma, and surrounding areas in 32 States.¹¹⁷ Care is provided to Native Americans and Alaska Natives residing in IHS areas regardless of insurance status or ability to pay.

The IHS offers a comprehensive range of services, including hospital and ambulatory medical care, preventive and rehabilitative services, dental care, mental health and alcoholism services, and health education. These services generally are provided directly through IHS-owned hospitals, health centers, and clinics; however, when no IHS direct care facility is available, or a service cannot be delivered by an IHS direct care provider, services are

¹¹⁵ Congressional Budget Office, *Veterans Administration Health Care: Planning for Future Years*, April 1984.

¹¹⁶ Committee on Ways and Means, *1991 Green Book*, May 7, 1991.

¹¹⁷ Lewin/ICF, *Health Care for Indians: Results from the American Indian Supplement to the 1980 Decennial Census*, Final Report submitted to ASPE, July 1988.

purchased from non-IHS providers who are under contract with IHS to cover services. Care provided under the contract care program is less readily accessible and pays only charges that are not covered by other third-party payers. The 1990 budget for IHS is \$1.29 billion.¹¹⁸

Community and Migrant Health Centers

Community and Migrant Health Centers (C/MHCs) are an important source of care for low-income, high-risk, and other underserved populations. Funded under Sections 329 and 330 of the Public Health Services Act, C/MHCs provide a comprehensive set of services to a defined geographic area, often with related social services and generally with participation of local community members.¹¹⁹ C/MHCs are required by law to be placed in medically underserved areas, including urban centers and rural communities with limited availability of services. While C/MHCs offer services to all seeking care, the majority served are uninsured or persons on public assistance.¹²⁰

As of 1990, there were 540 organizations operating 1800 health centers providing primary care to an estimated 5.8 million people on an annual budget of \$1 billion.¹²¹ C/MHC financing is derived from a variety of sources, including about 40 percent from Federal grant funds, 10 percent from State and local appropriations, and the remainder from Medicaid and Medicare reimbursement and patient fees.¹²² In order to receive Federal grant funds, C/MHCs must provide services to all patients regardless of ability to pay and must agree to accept assignment guaranteeing no balance

¹¹⁸ *Budget of the United States Government, Fiscal Year 1992*, U.S. Government Printing Office, 1991.

¹¹⁹ *Ibid.*

¹²⁰ A. Zuvekas, "Community and Migrant Health Centers: An Overview," *Journal of Ambulatory Care Management*, Vol. 13 (1990), pp. 1-12.

¹²¹ *Ibid.*

¹²² National Governor's Association, *A Healthy America, The Challenge for States*.

billing to Medicare- or Medicaid-eligible patients.¹²³ In addition, Federal C/MHC funds are available only to not-for-profit organizations with a consumer-majority governing board.

The range of services provided by C/MHCs varies and depends largely on available financial support. However, federally funded centers are mandated to provide certain services, including services of physicians, physician assistants, and nurse clinicians where feasible; diagnostic laboratory and radiologic services; preventive health services, including children's vision and hearing testing, perinatal services, well-child services, and family-planning services; emergency medical services; transportation services (as necessary); preventive dental services; and pharmaceutical services. C/MHCs receiving Federal funds are additionally required to be linked to providers offering other health services, have a 24 hours per day backup, and provide patient care management.

C/MHCs are finding it increasingly difficult to meet the needs of the populations they were intended to serve. Many inner city centers are at capacity and cannot serve additional persons. In addition, the increased complexity of the problems found in their populations, in terms of substance abuse, mental illness, and homelessness, has strained current resources at a time when recruiting providers is becoming increasingly difficult.

School-Based Health Centers

School-based health centers (SBCs) are another form of direct service targeted toward school-age children. These health centers began with the goal of providing medical services principally to adolescents who may otherwise not receive care, but they have been expanded to younger children as well. School-based health centers differ from the traditional school nurse

¹²³ A.W. Strange, "Financing of Outpatient Care: The Case of Community Health Centers," *Journal of Ambulatory Care Management*, Vol. 13 (1990), pp. 46-51.

in that they provide preventive and primary care, referral, and followup, in addition to vision and hearing testing and first aid. School-based health centers generally are cooperative ventures between the schools and area providers (including public health departments) who may staff the school-based center, serve as backup when the school-based centers are closed, and provide specialty care. Funding comes primarily from State health departments and private foundations, although city government and Federal grant dollars and Medicaid dollars also are an important source of financing.¹²⁴ A recent national survey found that most centers operate in senior high schools but 14 percent are based in middle or junior high schools.¹²⁵ All school centers responding to the survey require students to obtain parental permission in order to receive care.

SBCs typically serve low-income, high-risk areas. About one-third of all school-based clinic users are uninsured.¹²⁶ In a review of 22 SBCs funded by the Robert Wood Johnson Foundation, 19 percent of new clinic users reported that they had not received medical care for more than 2 years and 37 percent had no regular source of care or routinely used an emergency room.¹²⁷ School-based health centers are described in more detail in the next section on options for expanding access to care.

State and Local Providers

States and localities have traditionally played a major role in supporting health care and public health activities for area residents. Health-related services at the State and local levels are provided by a complex and

¹²⁴ H.J. Hyche-Williams and C. Waszak, *School-Based Clinics: Update 1990*, (Washington, DC: Center for Population Options, 1990).

¹²⁵ D. Kirby and C. Waszak, "An Assessment of School-based Clinics: Services, Impact and Potential," (Houston, TX: Support Center for School-Based Health Centers, October 1989).

¹²⁶ *Ibid.*

¹²⁷ C. Brandis, *A Review of Utilization Patterns in Clinics Funded by the Robert Wood Johnson Foundation*, (University of California, San Francisco: Institute for Health Policy Studies, 1990).

frequently changing network of agencies and organizations. The variety and arrangement of these health providers differ greatly both among and within States. For this reason, it is difficult to compare programs and services provided across States or to summarize these efforts at a nationwide level. In addition, programs may not collect data on socio-economic characteristics of the people they serve or estimate the unduplicated number of persons receiving care.

States and localities support a variety of direct services, including preventive, acute, and long-term care. These services are typically provided through systems of hospitals, clinics, health departments, and other providers.

County, City, and District Hospitals. Public hospitals supported by counties, municipalities, and hospital districts generally have a primary mission of caring for the medically indigent and provide an important source of care for the low-income and uninsured. These hospitals tend to be large and located in urban areas, although county and hospital district hospitals may be located in rural areas. The short-term public hospitals which are rurally located are often expected to serve both patients who can afford private care and those who cannot and may operate similarly to some private hospitals.¹²⁸

The role of the urban public hospital in particular as a direct service provider has grown considerably over the past decade. In addition to providing inpatient and emergency care to the medically indigent and serving as an important health care resource for the communities in which they are located, urban public hospitals increasingly offer outpatient care, tertiary medical specialties, public health services for the community, and medical education.¹²⁹ Recent attention in the health care reform debate has focused

¹²⁸ *Ibid.*

¹²⁹ *America's Health Safety Net: A Report on the Situation of Public Hospitals in Our Nation's Metropolitan Areas*, National Association of Public Hospitals, 1987.

particularly on the changing role of urban public hospitals and how this, in combination with growing numbers of uninsured and underinsured, is affecting their financial viability. These hospitals now face a large burden of nonpaying patients. In addition, urban public hospitals have been treating large numbers of expensive cases of HIV disease. Although supported by public monies, constrained State and local budgets have not permitted a corresponding increase in funds to the public hospitals to meet their expanded case loads.

State Hospitals. States operate a variety of acute and long-term care hospitals which provide a large amount of care to the uninsured and underinsured. Public hospitals are an especially important source of care for those with severe mental illness; every State operates at least one hospital for mentally ill and mentally retarded residents who cannot afford private care.¹³⁰ Many States also operate one or more chronic disease or tuberculosis hospitals. However, the number of these hospitals has steadily declined over the past three decades. States often operate these institutions because the need for these services appears greater than the capacity of the private sector or local communities to provide it. Other State-run hospitals include acute care facilities controlled by State medical schools and infirmaries associated with State prisons.

Public hospitals of all types accounted for 26 percent of all hospital expenditures in 1988. In short-term general acute care hospitals, locally owned facilities represent the largest share of public hospital spending. In the area of psychiatric hospitals, by contrast, States play the dominant role, accounting for over 70 percent of all spending on long-term psychiatric hospitalization in the United States, with Federal and local hospitals accounting for another 12 percent.

¹³⁰ F. Wilson and D. Neuhauser, *Health Services in the United States: Second Edition with 1987 Revisions*, August 1987.

Other Providers. In addition to hospital-based care, States and localities frequently provide ambulatory services related to disease prevention, health promotion, and communicable disease control. Services typically provided at the State and local level include maternal and child health programs, school health, nutrition, alcohol and drug abuse treatment, family planning, and health education.¹³¹ These efforts are often sponsored by different State agencies and delivered through a variety of community health centers, school clinics, and government offices.

State and local public health agencies, including public health departments, play a key role in providing direct community health services in most States. The Public Health Foundation reported that in FY 1987, personal health activities accounted for nearly 75 percent of State health agency spending.¹³² Funding for State health agency activities comes primarily from State funds and Federal grant and contract funds. The bulk of expenditures is attributable to maternal and child health (including WIC) and institutions operated by State health agencies.¹³³ Of the over \$8.1 billion spent by State health agencies in FY 1987, \$395 million was maternal and child health block grant funds and \$84 million preventive health block grant funds, which accounted for 8 percent and 1 percent, respectively, of all funds provided to local health departments by State health agencies.¹³⁴ State health agencies spent about \$1.3 billion for State-operated institutions.

Public health departments do not generally provide primary care services, and many view their mission as strictly promoting public health as defined by health surveillance and the control of epidemics. If they provide primary care, it is usually limited to immunizations, prenatal care, and well-child care. Some public health departments are concerned that if they assume a greater

¹³¹ *Ibid.*

¹³² Public Health Foundation, *Public Health Agencies 1989: An Inventory of Programs and Block Grant Expenditures*, March 1989, p.3.

¹³³ *Ibid.*, p.6.

¹³⁴ *Ibid.*, p.4.

role in the provision of primary care to the medically indigent, it may inhibit their ability to maintain community prevention functions.¹³⁵

Financing for Direct Services

Direct services are supported by a range of sources, including Federal, State, and local governments and private foundations. The Federal Government provides the majority of funding, but decentralization at the Federal level has resulted in an increase in State discretion over the use of these monies.

Public Funding

The largest source of public funding for direct services is the Federal Government. Spending for DoD and VA direct-service programs alone amounts to about \$24 billion. Other sources of Federal funds for direct services are Federal categorical and block grants administered by various Federal agencies. Public hospitals receive some indirect Federal support for the provision of direct services to the low-income under the provisions of the Hill-Burton Act. The availability of monies for hospital construction under Hill-Burton is tied explicitly to hospitals' provision of free care to low-income patients. States and localities also allocate general revenues to the provision of direct services, usually provided through State or locally run institutions, State health agencies and local health departments, and community health centers.

Three agencies in the Public Health Service, part of the Department of Health and Human Services, are involved in administering grants for direct service programs. These agencies are the Health Resources and Services Administration (HRSA), the Alcohol, Drug Abuse, and Mental Health

¹³⁵ National Governor's Association, *A Healthy America: The Challenge for States*.

Administration (ADAMHA), and the Centers for Disease Control (CDC). Federal funding of primary/preventive health through PHS community/migrant health, maternal and child health block grant, homeless health care, and preventive health block grant totaled \$1.3 billion in 1991.¹³⁶

Many PHS direct services programs were initially funded as categorical grants, and States applied to the Federal Government for funding to support particular programs that focused on particular health issues or targeted specific populations.¹³⁷ Under the Omnibus Budget Reconciliation Act of 1981 (OBRA 81), many of these categorical grants were grouped together into block grants. The major health block grants include:

- The Maternal and Child Health Block Grant (Title V) funds State programs for primary, preventive, and specialized care for mothers and children. In FY 1990, \$553.6 million was appropriated for this grant.
- The Alcohol, Drug Abuse, and Mental Health Block Grant is used to finance direct services for the treatment and prevention of mental illness, alcoholism, and alcohol and drug abuse. In FY 1988, total funding for this grant was \$487.3 million. Specific substance abuse and mental health initiatives within these areas include programs for pregnant women and infants, Native Americans and Alaska natives, high-risk youth, persons with AIDS, and the homeless mentally ill.
- The Preventive Health Services Block Grant supports State prevention programs, including screening programs and health evaluation/risk

¹³⁶ *Budget of the United States Government Fiscal Year 1992*, U.S. Government Printing Office, 1991.

¹³⁷ S. Griffiths, A. Will, and B. Owen, *Direct Service Provision Programs and Their Impact on the Uninsured*, paper prepared for the Business Roundtable, Project HOPE Center for Health Affairs, April 26, 1990.

reduction programs. In FY 1990, \$84.1 million was appropriated for this grant.

States now apply for a specific allocation of monies to support a wide range of services rather than applying for funds for different projects individually. The purpose of the block grants was to transfer authority to the States, offer flexibility in controlling State resources, and assign responsibility for addressing a variety of service needs to the States. The Federal role is to ensure that States comply with the general guidelines of the program and provide technical assistance to States.

Several other Federal categorical grant programs are administered through the Public Health Service. These include grants available to community and migrant health centers, homeless health care grants for providers targeting services to the homeless, and a childhood immunization grant program to purchase and maintain a stockpile of vaccines and support States' immunization efforts. The Public Health Service, through HRSA, also supports the National Health Service Corps, whose personnel are assigned to deliver care in designated health manpower shortage areas. Funding for the National Health Service Corps has fluctuated extensively in recent years. Following extensive program cuts in the late 1980's, the National Health Service Corps was allocated \$91.7 million for FY 1991, nearly double its FY 1990 allocation.

Private Funding

In addition to public spending, private philanthropy also supports direct services. Private foundations also contribute to the wide array of programs providing services to the uninsured or underserved. They may also play a significant part in public/private joint ventures established to address certain service delivery issues, such as the provision of health service in schools.

While many types of private sector organizations can contribute to the development of public health policy and the delivery of health care services, national and community foundations are most likely to be involved in direct service activities. In 1987, an estimated \$6 billion in grants was awarded to nonprofit organizations by 25,000 national and community foundations.¹³⁸

In general, foundations develop grant-making programs that support projects initiated and implemented by service, educational, and research organizations. Similar to many Federal Government programs, foundations provide financial support to projects meeting foundation criteria but do not directly provide the services themselves. Health-care-related funding may account for a small portion of a foundation's activities or may be the sole area of foundation interest. The Robert Wood Johnson Foundation, W.K. Kellogg Foundation, the Henry J. Kaiser Family Foundation, and the Rockefeller Foundation are among the larger philanthropic organizations nationally active in health areas.¹³⁹

Many of these larger independent foundations establish nationwide initiatives or demonstrations that result in funding for multiple projects and may be involved with joint public/private projects. Some projects may receive funding from more than one major philanthropy.

A variety of voluntary organizations, at least partially funded by private contributions, also provide direct services for specific health or social welfare problems. For example, the American Cancer Society provides many cancer patients with medical supplies, equipment, and transportation, Planned Parenthood operates over 700 family planning clinics, and other private service agencies provide counseling and referrals for problems ranging from

¹³⁸ The Foundation Center, *National Guide to Foundation Funding in Health*, Washington, DC, 1988.

¹³⁹ F. Wilson and D. Neuhauser, *Health Services in the United States: Second Edition With 1987 Revisions*.

drug abuse to suicide prevention.¹⁴⁰ HCFA estimates that in 1987, other private sources of payment amounted to \$2.2 billion for hospital care, \$200 million for physician services and other professional services, and \$300 million for nursing home care.

Out-of-Pocket Spending

In addition to public and private financing, out-of-pocket payments by the users of direct services contribute to the financing of these services. However, receipts from users comprise only a small portion of total financing for direct services because the population receiving direct services is largely low-income and uninsured. Average out-of-pocket expenditures for health care for uninsured persons are lower in dollar terms than for insured persons. From adjusted NMCUES data, Lewin/ICF estimates that out-of-pocket expenditures per person in 1988 were about \$430 for uninsured persons and about \$463 for persons with insurance. Out-of-pocket spending for the uninsured is lower than among those with insurance for several reasons: The uninsured use fewer health care services than do those with insurance; they do not bear a share of premium costs for their insurance; and the uninsured pay out-of-pocket for only about half the care they receive. The rest of their care is financed through other sources discussed here, such as charity care, county hospitals, general assistance, and other public sources. In addition, the insured generally have higher incomes than do the uninsured; so they are more likely to obtain some forms of health care that may not be covered by insurance, such as dental care and mental health services. The extent to which the uninsured receive these services may depend on the services being offered by a direct service provider and subsidized so that the need for out-of-pocket expenditures is minimized.

¹⁴⁰ *Ibid.*

Implicit Subsidies and Cost Shift

Charity care by hospitals and other providers traditionally has been financed through cross-subsidies from privately insured patients. Hospitals in particular have charged more to insured patients to help finance unpaid bills. Estimates of total charity care are not available, but the cost of uncompensated care¹⁴¹ (charity care and bad debt) provided by hospitals in 1989 was estimated at approximately \$10 billion.¹⁴²

Uncompensated care appears to involve a bimodal distribution of services. A large proportion of such care is due to many small bills, especially for emergency room and outpatient services.¹⁴³ Another large portion of this uncompensated care is for high-cost illness. In a sample of hospitals in Florida, for example, only 2 percent of all patients with unpaid bills had expenses of \$10,000 or more, but their bills accounted for 32 percent of all uncompensated care.¹⁴⁴

More is known about the charity care provided by hospitals than that of other providers. Evidence exists that some physicians do reduce their charges for uninsured, low-income patients. Surveys suggest the charity loads may be as high as 10 percent in some communities. The survey data must be used with

¹⁴¹ Uncompensated care includes charity care, services for which individuals could not be expected to pay, and bad debt, care for which payment was expected. Uncompensated care may be stated in terms of the charges billed but unpaid, or the costs associated with that care, which may be a better reflection of the resources required to furnish the care. In the past, hospitals have stated uncompensated care spending in terms of charges, but recent analyses have begun presenting cost estimates. For the purposes of illustrating the magnitude of hospital cost-shifting, the American Hospital Association (AHA) has defined "unsponsored care costs." Unsponsored care costs equal uncompensated care costs minus State and local governmental tax appropriations. This approximates the net amount of "free" care absorbed by the hospital or shifted to private payers.

¹⁴² Lewin/ICF estimates using the Health Benefits Simulation Model.

¹⁴³ Health Policy Institute, *Health Care for the Medically Indigent in Southwestern Pennsylvania*, HPI Policy Series #15, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, PA, September 1988.

¹⁴⁴ Lewin and Associates and the Center for Health Policy Research, University of Florida Health Center. Unpublished data runs, presented to the Florida Statewide Health Council, March 7, 1986.

caution, however, because response rates are typically low and the data are based upon estimates provided by physicians and their office staffs. Moreover, most hospitals have systems for assigning uninsured patients without a regular physician to staff physicians or medical staff members for treatment if a patient is admitted through the emergency room. Often, these physicians provide followup care. Physicians in several States have helped organize formal systems for referring uninsured patients to community physicians for care at no cost.¹⁴⁵

The Role of Direct Services in Reform

As an integral component of our health care system, direct services will play a role in any national health care reform initiative. The appropriate role for direct services will largely depend on the nature of the strategy adopted for expanding access to care. Most of the health care reform proposals that are currently under consideration would expand insurance coverage to all Americans. To date, no proposal has advanced a system built entirely on the provision of direct services and the elimination of insurance, although several plans, including some enacted at the State level, have recommended an integral component of limited direct service expansion to cover the uninsured.

Any expansion of insurance could result in a redistribution of financing from direct services. As additional persons are insured, direct service providers would obtain an increase in third-party reimbursement, perhaps permitting providers to reallocate other appropriated dollars to deliver additional services or expand capacity and access. Alternatively, these dollars may be used to

¹⁴⁵ Lewin/ICF, *Ensuring Access to Primary Health Care for the Medically Indigent in Fairfax County: A Three Part Strategy*, discussion draft prepared for the Fairfax County Board of Supervisors. Washington, DC, March 1988; "Opening the Door for the Medically Indigent: Kentucky Physicians Volunteer Their Services." *American Medical News*, September 26, 1986, pp. 11-12.

fund a portion of the expansion in insurance coverage. It is important to recognize, however, that expanding insurance does not eliminate the role for direct services and that a total redistribution of financing would not occur.

The role of direct services in a system in which health insurance is expanded to all Americans would essentially be threefold:

- To ensure that providers are available to serve the currently and newly insured persons. Particular emphasis would need to be placed on ensuring the availability of health care providers in rural areas and inner city areas.
- To complement the benefits covered by insurance. Any insurance plan adopted on a national basis or any set of mandated basic benefits is not likely to include the full range of benefits needed by all persons, particularly those with special health care needs. A direct service system could be maintained to provide certain services (e.g., immunizations) to certain high-risk persons in need of those services. In addition, some of the newly insured will be persons who have not had insurance and may have difficulty navigating the health care system. A role for direct services could be to target certain populations for support services such as outreach, case management, and transportation, which are likely to be excluded from coverage.
- To ensure services to certain hard-to-serve populations who might be perceived as being more appropriately served through a direct service system, such as the homeless and substance abusers.

The extent to which direct services can be used to supplement an expansion of insurance coverage will depend largely on available resources. For example, large capital expenditures may be required to establish capacity in some rural areas or augment capacity in urban areas. As tradeoffs are made

between containing costs and expanding access to care, the role of insurance and direct services should be examined simultaneously to ensure that efforts to expand access are structured in the most efficient and cost-effective manner for reaching the target populations and building on the established infrastructure on which many currently rely for care.

THE PROBLEM OF LONG-TERM CARE

Five major problems affect the United States' long-term care financing and delivery system. These problems include:

- the catastrophic costs of long-term care;
- the lack of public or private risk pooling;
- variation and lack of access;
- questionable quality of long-term care services; and
- high and increasing long-term care expenditures.

This paper briefly discusses each of these problems as well as the factors that contribute to each problem and the consequences of each problem.

The Catastrophic Costs of Long-Term Care

Many persons, particularly the elderly, have been or fear being impoverished by the catastrophic costs of nursing home and other long-term care (LTC) services.¹⁴⁶ For example, a recent American Association of Retired Persons survey found that 64 percent of Americans are "very concerned" about the costs of LTC, 53 percent are "not very" or "not at all confident" that they would be able to pay for LTC, and 73 percent believe that nursing home

¹⁴⁶This discussion of long-term care concentrates mainly on the elderly because less is known about the long-term-care use of the nonelderly.

costs would impoverish them.¹⁴⁷ These fears are justified. While only about 5 percent of the elderly are nursing home patients at any one time, estimates of the lifetime chance of having at least one elderly nursing home stay range from 25 to 63 percent, with most of the estimates clustering at 40 to 50 percent.¹⁴⁸ While many of these nursing home stays are short (under a year), the elderly face about a 20-percent chance of spending a year or more in a nursing home.¹⁴⁹ Since a year's stay in a nursing home now averages about \$30,000, the risk of incurring substantial LTC expenses for the elderly is quite high.

It is important to realize that "catastrophic costs" should be measured on a relative, rather than an absolute, scale. In other words, an expense of \$30,000, while high, can be afforded by individuals with substantial incomes and personal wealth. At the same time, even expenses of \$1,000 to \$2,000 can completely wipe out a poor individual's or a family's savings.

The importance of measuring the costs of catastrophic care on a relative scale becomes particularly important when one considers those most at risk for entering nursing homes—single (often widowed) elderly women.¹⁵⁰ Grad found that the rate of poverty among widows (26 percent) in 1984 was roughly three times the rate among retired workers (7 percent) or the aged wives of retired workers (9 percent).¹⁵¹ Grad also found that the median

¹⁴⁷The Daniel Yankelovich Group, Inc. *Long Term Care in America: Public Attitudes and Possible Solutions, Report of Study Findings* (Washington DC: The American Association of Retired Persons, 1990).

¹⁴⁸M.A. Cohen, E.J. Tell, and S.S. Wallack, "The Lifetime Risks and Costs of Nursing Home Use Among the Elderly," *Medical Care*, 1986, pp. 1161-1172. The Brookings/ICF Long-Term Care Financing Model (LTCFM) estimates the chance at roughly 50 percent, while another recent estimate is 43 percent (Peter Kemper and Christopher M. Murtaugh, "The Lifetime Use of Nursing Home Care," *The New England Journal of Medicine*, Feb. 28 1991, pp. 595-600.)

¹⁴⁹Estimates from the Brookings/ICF Long-Term Care Financing Model.

¹⁵⁰Estimates from the Brookings/ICF Long-Term Care Financing Model and Kemper and Murtaugh, "The Lifetime Use of Nursing Home Care."

¹⁵¹Susan Grad, "Income and Assets of Social Security Beneficiaries by Type of Asset," *Social Security Bulletin*, Jan. 1989, pp. 2-10.

net worth of elderly widows was about two-thirds and the median level of financial assets was less than one-half of the levels of retired workers and their aged wives. Thus, the group least able to afford high long-term care costs is the same group which has the highest risks of incurring these costs.

Individuals and families with catastrophic costs often end up spending all their assets and relying on Medicaid to pay for their long-term care. This process is called "spenddown" to Medicaid.¹⁵² For many elderly, the loss of their lifetime savings is not the most devastating problem associated with Medicaid spenddown. For middle class elderly who spend down to Medicaid, the loss of financial control and the stigma associated with being on welfare are even more significant problems.

The Lack of Public or Private Risk Pooling

The Inability to Pool Risks

From the perspective of a potential long-term care patient or his or her family, the potentially catastrophic costs of this care are not the only problem. A bigger problem is that the elderly have been generally unable to insure themselves against this risk. Unlike elderly acute care expenses, which are covered by public programs (e.g., Medicare, or Medicaid for the low income elderly) or private insurance (e.g., Medigap policies), the elderly must pay for a much higher fraction of their long-term care expenses out-of-pocket. As seen in Table 1, the fraction of total expenses that are paid privately for nursing home care ranged from 57 to 59 percent for different elderly groups.¹⁵³ This is in contrast to the 27 to 38 percent share covered by private sources for non-nursing home care.

¹⁵²Denise A. Spence and Joshua M. Wiener, "Estimating the Extent of Medicaid Spenddown in Nursing Homes," *Journal of Health Politics, Policy and Law*, Vol. 15, No. 3, Fall 1990.

¹⁵³Almost all private financing nursing home care is paid out-of-pocket by recipients and their families.

When facing large expenses, families typically do one or more of the following three activities: (1) borrow money (e.g., home mortgages, car loans, educational loans); (2) save money in advance (e.g., retirement savings, saving for a child's college education); or (3) purchase insurance (e.g., health insurance, fire and home casualty insurance, automobile insurance). The first two funding options may not provide adequate funding for long-term care. It is unlikely that individuals would be able to borrow to help pay for long-term care unless they could provide collateral for such a loan.¹⁵⁴ Because it is extremely uncertain whether any particular elderly individual or family will face high LTC expenses and even more uncertain how high those expenses could be, funding LTC through private saving may not be an efficient method of preparing for its potential costs unless anticipated decades before the need.

That is, to protect themselves against the risk of a 1-year nursing home stay, all elderly would have to save at least \$30,000. For the one elderly in five with a stay of about 1 year, this would have been an appropriate level of savings. However, for the three elderly in five who do not enter a nursing home or have very short stays, this would result in "oversavings"—they could have increased their standard of living instead of saving for the contingency. Finally, the one elderly in five who has a longer stay would not have saved enough.

Insurance, however, remains a logical and efficient method of preparing for and funding long-term care expenses. Insurance takes advantage of risk-pooling, where the risk of long-term care costs is spread across users and nonusers alike. By spreading these expenses, the highest possible costs borne

¹⁵⁴Many researchers have considered the possibility of the elderly financing their long-term-care expenses by converting their home equity into liquid assets through reverse annuity mortgages (RAMs). For example, see W.D. Weinrobe, "Home Equity Conversion and the Financing of Long-Term Care," *Health Care Financing Review Annual Supplement*, 1988, pp. 113-116. Because of the reluctance of both the elderly and banks to engage in this activity, very few elderly have adopted reverse annuity mortgages.

TABLE 1
PER CAPITA MEDICAL EXPENSES OF THE ELDERLY IN 1987
(1989 Dollars)

	AGE				
Source	65 to 69	70 to 74	75 to 79	80 to 84	85+
Non-Nursing Home Expenses					
Total	\$3,889	\$4,446	\$5,079	\$5,582	\$5,938
Private	\$1,458	\$1,483	\$1,510	\$1,535	\$1,571
Private as a Percent of Total Expenses	37.5%	33.5%	29.7%	27.5%	26.5%
Nursing Home Expenses					
Total	\$180	\$393	\$875	\$1,750	\$4,080
Private	\$103	\$224	\$503	\$1,012	\$2,392
Private as a Percent of Total Expenses	57.0%	56.9%	57.4%	57.8%	58.6%

SOURCE: Daniel R. Waldo et al., "Health Expenditures by Age Group, 1977 and 1987," *Health Care Financing Review*, Summer 1989, pp. 111-120.

by one family is greatly reduced. Methods of pooling risk include public (social insurance) and private (long-term care insurance) options.

Why Isn't There More Risk Pooling?

Unfortunately, there is very little public or private risk pooling for long-term care expenses. Three major reasons for the lack of long-term care risk pooling:

Public programs which fund LTC expenses do not provide risk pooling.

The Medicare program is meant to provide the elderly with acute care coverage, not long-term care. For this reason, the only "long-term care" coverage Medicare provides is for skilled nursing facility (SNF) care and home health care following acute care hospital stays. Medicare thus provides less than 5 percent of all long-term care spending for the elderly. The Medicaid program provides long-term care benefits only to the indigent and thus is not a source of risk pooling.¹⁵⁵

Current retiree health insurance benefits mainly cover acute hospital care and physician services, not chronic home care services or nursing home care. Retiree health plans of today typically convert to a Medicare supplemental insurance-like (Medigap) policy once a retiree accepts Medicare benefits. Medigap policies, by design, do not cover extended nursing home care or home care services for the chronically disabled.

The private long-term care insurance market is not mature. Current estimates place the number of long-term care policies sold as of the end of 1990 at 1.9 million.¹⁵⁶ This means that less than 5 percent of the elderly

¹⁵⁵When a patient first enters a nursing home, he or she is required to exhaust any Medicare, private insurance benefits, and personal resources before qualifying for Medicaid benefits. The exhaustion of personal resources is known as Medicaid spenddown. During spenddown, individuals must surrender all current income except for a small personal allowance (currently \$30 per month) and almost all assets (most States allow the patient to keep roughly \$2,000). Medicaid then covers any nursing home costs in excess of the patient's remaining income. For example, if a patient starts with \$10,000 in assets and \$1,000 per month in income and nursing home care costs \$2,500 per month, the patient must spend \$8,000 in assets (assuming he or she can keep \$2,000). When these assets are exhausted, the patient then surrenders \$970 = \$1,000 - \$30 (the personal allowance) of his or her monthly income to the home, and Medicaid contributes the remaining \$1,530 = \$2,500 - \$970.

For married couples, a spouse remaining in the community can retain some of the couple's assets and income. The community spouse is entitled to any of the couple's income up to 150 percent of poverty, and all of the couple's assets up to \$12,000 or half of the couple's assets to a cap of \$60,000. For example, in the case of a couple with \$10,000 in assets, the community spouse can keep all \$10,000; in a couple with \$30,000 in assets, the community spouse can keep \$15,000; and in a couple with \$200,000 in assets, the community spouse is entitled to \$60,000.

¹⁵⁶Health Insurance Association of America, *News Release*, May 30, 1991. The number of policies in force is less than 1.9 million.

have long-term care insurance. There are many reasons why so few persons have purchased private long-term care insurance. These reasons can be divided into two major areas.

Limited demand for long-term care insurance. There are a variety of reasons why individuals have not purchased long-term care insurance: (1) Many individuals underestimate the risk of incurring long-term care expenses and thus think they do not need insurance; (2) many individuals mistakenly think that Medicare or their Medicare supplemental policies ("Medigap") would pay for an extended nursing home stay;¹⁵⁷ (3) many elderly individuals, particularly older elderly, may not be able to buy insurance because they are disabled; (4) many elderly, particularly the older elderly, cannot afford the insurance; (5) many elderly who could afford the insurance do not think the policies now offered will protect them or provide the type of care they would like;¹⁵⁸ (6) many elderly do not think that the policies currently sold are a good value; (7) younger persons do not consider purchasing long-term care insurance because the risk of use is a remote possibility; and (8) many employers are not considering including long-term care insurance among the benefits offered employees because of the ambiguity concerning long-term care in the tax code.

Limited supply of insurance. Until recently, there were few companies offering long-term care insurance. This means that many of the current elderly have not been able to purchase insurance: (1) Most policies are not sold to individuals older than age 80; therefore many older elderly have been unable to buy a policy; (2) some elderly who are between the ages of 70 and 80 are unable to afford the insurance, although they could have afforded it at

¹⁵⁷The Daniel Yankelovich Group, Inc. *Long Term Care in America: Public Attitudes and Possible Solutions, Report of Study Findings.*

¹⁵⁸A long discussion of the alleged deceptive marketing practices of the LTC insurance industry is presented in *Consumer Reports*, June 1991, pp. 425-442.

an earlier age;¹⁵⁹ (3) because of lack of employer interest, there has been a very limited employer group insurance market until recently; and (4) because of the potential uncertainties associated with the tax status of the policies and their risk, until recently insurance companies have not aggressively marketed policies on an employer-group basis.

Variation and Lack of Access

Variation in the availability and reimbursement of long-term care services causes inter- and intra-State variation in access to public long-term care services. In many areas, there is a lack of access to home care services. Many analysts think there is an institutional bias in public spending for long-term care services. For example, only 11.5 percent of total long-term care spending in 1990 was devoted to home and community-based care.¹⁶⁰

Inadequate Reimbursement

Economic theory suggests that access to long-term care will be related to the level of reimbursement.¹⁶¹ For example, a nursing home will tend to accept "heavier care" patients only if the home receives more money for their care, and homes tend to accept patients who pay the highest rates first before accepting patients paying lower rates. Private pay patients, who almost always pay the highest rates a home receives for care are thus often served first. Public pay patients must then often wait for nursing home care.¹⁶² A

¹⁵⁹Stanley S. Wallack, "Recent Trends in Financing Long Term Care," *Health Care Financing Review: Annual Supplement*, 1988, pp. 97-102. Delaying the age of purchase substantially increases premiums because policies are age-rated. For example, a policy offered by AARP/Prudential has premiums of \$20 per month at age 55, but \$135 per month at age 75.

¹⁶⁰U.S. Department of Health and Human Services, *News Release*, Oct. 2, 1991.

¹⁶¹William J. Scanlon, "A Theory of the Nursing Home Market," *Inquiry*, Spring 1980, pp. 25-41.

¹⁶²A. Dor, "The Cost of Medicare Patients in Nursing Homes in the United States," *Journal of Health Economics*, vol. 8 (1989), pp. 253-270.

recent GAO report documented these access problems for heavy care and Medicaid patients.¹⁶³

The Supply of Nursing Home Services

In 1989, the number of nursing home beds per 1,000 of the aged 65 and older population in the United States was 52.8; this ranged from a low of 26.2 in Nevada to a high of 85.3 in Kansas.¹⁶⁴ Many States attempt to rigidly control this supply through certificate of need (CON) and construction moratoria programs. Whether these controls result in an undersupply of nursing home beds is debatable. Other analysts think that the problems of low bed supply are due more to low levels of capital cost reimbursement under State Medicaid programs than to CON programs.

In some States with high ratios of nursing home beds to elderly, there still may be an excess demand for beds,¹⁶⁵ while States with low ratios might provide non-nursing home care arrangements (for example, Florida had a ratio of 26.9 beds per 1,000 aged 65 and older in 1989 but has a large number of board and care homes). Whether nursing home bed-to-population measures are the best measure of the amount of care that is available is uncertain, but the supply of care measured in this manner has fallen rapidly. For example, from 1978 to 1989, the number of beds per 1,000 declined from 59.2 to 52.8 (a decline of 11 percent). If this declining trend in bed supply continues, the lack of nursing home beds may pose serious access problems in the future.

¹⁶³U.S. General Accounting Office, *Nursing Homes: Admission Problems for Medicaid Recipients and Attempts to Solve Them*, September 1990.

¹⁶⁴U.S. Department of Commerce, Bureau of the Census, *State Population and Household Estimates: July 1, 1989*, Series p-25, No. 1058, 1990.

¹⁶⁵Joseph Nyman, "Analysis of Nursing Home Use and Bed Supply: Wisconsin, 1983," *Health Services Research*, vol. 24 (October 1989), pp. 511-537.

Problems with Access to Home and Community-Based Long-Term Care

While Medicaid's long-term care benefit does cover home care, the majority of expenditures in most States is for institutional care. In addition, most of the services provided under the Medicaid home health benefit are medically oriented. In the Omnibus Budget Reconciliation Act (OBRA) of 1981, Congress attempted to correct this imbalance. In Section 2176 of OBRA, States were permitted to apply to the Health Care Financing Administration (HCFA) for 3-year waivers to expand home and community care for long-term care patients. To be granted approval, however, these 2,176 waivers had to: (1) serve only patients who would otherwise be institutionalized and (2) cost no more than the foregone institutional care. In 1987, only 3 percent of the elderly impaired population were covered by these waiver programs.¹⁶⁶ Many States do supplement Medicare and Medicaid home care services with their own state-funded home care programs. These programs are quite limited, however.

The limited supply of these home and community LTC services helps explain why many elderly impaired persons living in the community are not receiving care. Rowland (1989) found that 20 percent of the impaired community elderly (defined as individuals with two or more activity of daily living impairments [ADLs])¹⁶⁷ reported receiving no ADL assistance and 44 percent of those living alone received no personal care.¹⁶⁸

¹⁶⁶Special Committee on Aging, 1988.

¹⁶⁷ADL impairments are problems with the basic tasks of daily living, such as eating, bathing, dressing, toileting, and transferring. The other well-known type of disability, instrumental activities of daily living (IADL) impairments are problems with basic cognitive or social tasks, such as cooking, housekeeping, shopping, etc.

¹⁶⁸Diane Rowland, "Measuring the Elderly's Need for Home Care," *Health Affairs*, Winter 1989, pp. 39-51.

Caregiver Burden

Without more public home and community long-term care services or better access to nursing home care, a disproportionate amount of care is provided by the family or friends of the patient. This informal care is frequently unpaid and may impose substantial economic and emotional burdens on the caregiver. Caregivers are almost always relatives of the patient, and typically are wives, daughters, and daughters-in-law. Currently, roughly 80 percent of the elderly disabled population receive some informal care. Many of these caregivers are in late middle age or are elderly: (1) 42 percent are 45 to 64 years old; (2) 26 percent are 65 to 74; and (3) 10 percent are age 75 and older.¹⁶⁹ Middle-aged caregivers are often referred to as part of the "sandwich generation"; they are caught juggling the demands of employment, their young children and spouses, and their elderly parents.

Questionable Quality of Long-Term Care Services

While anecdotal evidence suggests that the quality of care in some nursing homes is low, measuring the quality of care (or even agreeing on appropriate indicators of the quality of care) is difficult. For example, a 1986 Institute of Medicine Study concluded that "no studies ... have adequately investigated the complex relationship among costs, charges, reimbursement, and quality."¹⁷⁰ Still, many analysts believe that the quality of care in some nursing homes and home care settings is poor and that the quality of care varies substantially within and across different States and patient categories (e.g., private pay, Medicaid, and Medicare). Nursing homes whose patients

¹⁶⁹Select Committee on Aging, U.S. House of Representatives, 1987.

¹⁷⁰Institute of Medicine, *Improving the Quality of Care in Nursing Homes*, Washington DC, National Academy Press, 1986.

are mostly private generally provide higher quality care than facilities dependent on Medicaid patients.¹⁷¹

The factors contributing to inadequate quality include a lack of understanding of the process of effective care, a lack of knowledge about the effect of licensure, certification, and other regulations on the quality of care, low staffing standards, a lack of consumer information, and low public reimbursement rates.

Currently, HCFA is addressing the issue of quality of care in nursing homes and home care settings (particularly for public pay patients—Medicare and Medicaid) with the implementation of the OBRA 1987 regulations which cover the screening of mentally impaired (MI) and mentally retarded (MR) patients, new inspection procedures, and increased staff nursing requirements, including nurse's aide training. It is not clear, however, what the effect of OBRA 1987 will be on quality of care and quality of life in long-term care settings, on the cost of nursing home care, or on regulation compliance costs.

Even with more effective regulations, the problem of potential differences in the quality of care among different patient pay status groups (private, Medicare, and Medicaid) remains. Because Medicaid programs pay less for patient care, some analysts consider the current system of long-term care delivery to be a two-tiered system in terms of both access to care and the quality of the services delivered.¹⁷² Private pay patients receive as much high quality care as they are willing to pay for, while Medicaid patients must "wait in line" for care of lower quality as it becomes available.

¹⁷¹Alice Rivlin and Joshua M. Wiener, *Caring for the Disabled Elderly*, The Brookings Institution, 1988.

¹⁷²William J. Scanlon, "A Theory of the Nursing Home Market," *Inquiry*, Spring 1980, pp. 25-41.

High and Increasing Long-Term Care Expenditures

In 1990, \$53.1 billion was spent on nursing home care in the United States; 52 percent (\$27.7 billion) of this total was provided by public programs. Medicaid (\$24.1 billion) and Medicare (\$2.5 billion) accounted for over 90 percent of total public spending. The estimated total spending on home care in the same year was \$6.9 billion.¹⁷³ The Brookings/ICF Long-term Care Financing Model (LTCFM) estimates that long-term care spending for the elderly will exceed \$100 billion (1989 dollars). The Federal and especially the State governments' budgets could well experience explosive expenditure growth for publicly provided long-term care services. Paying for long-term care will place great strain on already stretched budgets and may force States to consider explicitly the tradeoffs between funding the health care of the elderly and funding that of the non-elderly poor (through Medicaid).

Two trends account for the rapid, predicted growth in total long-term care costs. First, the size of the elderly population, in absolute size and measured as a fraction of total population, is growing rapidly. In 1990, the 31.6 million elderly (age 65 and older) and 3.3 million oldest old (age 85 and over) comprised approximately 12.7 and 1.3 percent of the total population, respectively. By 2030, the Bureau of the Census estimates that the elderly population will more than double to 65.6 million (21.2 percent of the population), and the oldest old population will exceed 8 million (2.8 percent of the population).¹⁷⁴

Second, the costs of long-term care have risen rapidly, and there is no reason to believe this trend will not continue in the future. As table 2 indicates,

¹⁷³U.S. Department of Health and Human Services, *News Release*, Oct. 2, 1991.

¹⁷⁴U.S. Department of Commerce, Bureau of the Census, *State Population and Household Estimates: July 1, 1989*.

TABLE 2

**ANNUAL GROWTH IN NURSING HOME REVENUES,
THE NURSING HOME INPUT PRICE INDEX (NHIPI),
AND THE CONSUMER PRICE INDEX (CPI), 1982 TO 1989**

Year	Growth in NH Revenue	NHIPI Growth	CPI Growth
1982	11.2%	8.2%	6.1%
1983	8.8%	5.9%	3.2%
1984	8.0%	5.0%	4.3%
1985	6.8%	3.9%	3.6%
1986	5.9%	3.0%	4.3%
1987	6.6%	3.7%	3.7%
1988	8.6%	5.6%	4.1%

SOURCE: Office of National Cost Estimates, Office of the Actuary, HCFA.

nursing home revenue and nursing home input prices have been increasing more rapidly than the consumer price index. From 1982 to 1988, nursing home revenues grew 71 percent, and nursing home input prices grew, 41 percent, both exceeding the 30-percent rise in consumer prices during the same period.

It must be stressed that predicting the path of future long-term care expenditures is difficult. Most projections of the future demand for long-term care assume that elderly rates of disability remain constant and that the supply of long-term care services, particularly nursing home beds, grows at the same rate as the increase in elderly population. Both assumptions are problematic. In addition, the demand for formal long-term care services may change if (1) the relative supply of informal care declines; (2) more of the

elderly are covered by private LTC insurance; or (3) its price increases more rapidly than elderly incomes.

It is clear that in the future, long-term care expenditures will increase. Public expenditures will also increase. However, as a percentage of GNP, expenditures for long-term care may not increase dramatically.¹⁷⁵ But, in the current environment, even small increases may not be manageable for many States.

¹⁷⁵Alice Rivlin and Joshua M. Wiener, *Caring for the Disabled Elderly*, The Brookings Institution, 1988.



Part One: Access

Innovative Approaches to Expanding Access to Care



HEALTH INSURANCE REFORM FOR SMALL EMPLOYERS AND HIGH-RISK INDIVIDUALS

With about one-third of uninsured workers and their dependents employed by firms with fewer than 25 employees, widespread attention has focused on the small-employer market for health insurance. As described earlier, small employers may be denied health insurance or face higher premiums than larger groups for comparable coverage. These higher premiums reflect the greater administrative costs associated with servicing small groups and the increased risk associated with insuring them.

Many proposals for health insurance reform are intended to expand the availability and affordability of coverage for small firms. Others are designed to assist high-risk individuals. This paper reviews the major health insurance reform proposals that have been advanced in this area and their implications for coverage. It focuses on reforms directed toward the private health insurance industry as opposed to broad-based reforms of the health care system.

The health insurance reform proposals can be grouped into six major categories:

- small-employer market reforms;
- private reinsurance;
- mandatory community rating;

-
- risk pools for uninsurable individuals;
 - affordable coverage for small-employer groups; and
 - tax assistance for small employers.

Each of these reforms is described below.

Small-Employer Market Reforms

Many of the major health care reform proposals include a component to reform the small-employer insurance market. As part of broader health care reform proposals, a number of groups have proposed a set of small-employer market reforms which are intended to increase the availability and affordability of health insurance for small firms. These groups include the Health Insurance Association of America, the U.S. Chamber of Commerce, Blue Cross and Blue Shield Association, and the National Association of Insurance Commissioners (NAIC) (exhibit 1). At the Federal level, legislation on insurance reforms for the small group market was first introduced last fall by Senator Durenberger, and numerous other bills containing insurance market reforms have been introduced in Congress (exhibit 2). These reforms are likely to improve the availability of insurance coverage for small employers; however, they do not explicitly address the problem of affordability.

The small-employer market reform proposals are intended to achieve three goals: (1) to ensure that all groups have access to health insurance at prices close to those for standard risks and that no groups or individuals within these groups can be denied coverage; (2) to prohibit cancellation of coverage

EXHIBIT 1
COMPARISON OF SELECTED INDUSTRY SMALL GROUP INSURANCE REFORM PROPOSALS

	HIAA	U.S. Chamber of Commerce	Blue Cross and Blue Shield Association	NAIC Accident & Health Committee
Availability	All employers with between 3 and 25 employees will not be denied coverage even if one or more employees might be uninsurable or a high risk.	Insurers must accept all employees when providing group coverage to a company.	Require employers with from 3-25 employees to provide and employees to accept health insurance.	No specific requirements.
Renewability	Once insured, neither the group nor an individual in the group may be denied continued coverage because the group's or the individual's health deteriorates.	Once accepted, the group should be guaranteed renewal at pooled rates.	No small employer may be dropped from coverage because of poor claims experience.	Once insured, neither the group nor an individual in a group may be denied continued coverage because the group's or the individual's health deteriorates unless the insurer terminates an entire class of groups or all groups.

(Continued)

EXHIBIT 1 (Continued)

	HIAA	U.S. Chamber of Commerce	Blue Cross and Blue Shield Association	NAIC Accident & Health Committee
Rate Increases	Limit rate of annual rate increases relative to other groups insured by same carrier.		Support NAIC reforms.	Limit rate increase to 135 percent of increase in the insurer's new business rate level. No restrictions on how much an insurer can increase its new business rate levels.
Medical Underwriting	Permissible only for the purpose of determining the level of risk.		Eliminate pre-existing condition exclusions; permit 12 month waiting period.	Retain ability to exclude individuals on the basis of medical underwriting. It maintains lower rates for the vast majority at the expense of a few individuals or small businesses.
Continuity of Coverage	Benefits may not be denied where the insured is changing either employers or insurance carriers.	No limitations imposed on an individual who has been continuously, when that person changes employment or coverage.	Insurance is portable when the insured changes jobs or insurance carriers.	

(Continued)

EXHIBIT 1 (Continued)

Premium Limits	No group would pay more than 150 percent of the average cost of similar groups for basic coverage.		Support NAIC reforms.	No group should pay more than 150 percent of the insurer's lowest new business rate level.
Reinsurance	Privately funded and administered mechanism through which insurers could reinsure high risk persons.	Provide a reinsurance pooling mechanism to provide direct access to small employers who otherwise have been rejected and to spread risks among participating insurers and HMOs.	Unresolved.	Unresolved.
Federal/ State Role	Subsidies to small employers.		Subsidies to small employers and low-income individuals regulate insurance at state level.	

EXHIBIT 2

COMPARISON OF SELECTED CONGRESSIONAL BILLS ON HEALTH INSURANCE REFORM

	Sen. Durenberger	Rep. Johnson and Rep. Rhodes	Rep. Stark	Sen. Rockefeller and Rep. Warren	Sen. Mitchell
Availability	Guaranteed basic benefit plan; no rejection based on medical underwriting.	Guaranteed basic benefit plan; no rejection of employees based on medical underwriting.	Guaranteed issue of Medicare plus plan; no rejection of employees.	Guaranteed issue of all coverage for small business, regardless of health status, medical history, or claims experience.	Guaranteed issue of all coverage for any small business regardless of health status, medical history, or claims experience.
Renewability	Guaranteed renewability.	Guaranteed renewability.	Guaranteed renewability.	Guaranteed renewability.	Guaranteed renewability.
Rate Increases	Limits rate of increase to variation within a class of business.	Limits rate of increase to variation with a class of business.	Based on community rating.	Based on community rating within a block of business.	Based on community rating within a block of business.

(Continued)

EXHIBIT 2 (Continued)

Medical Underwriting	Waiting period for up to 6 months.	Limits rate of increase to variation with a class of business.	Waiting period for up to 6 months.	Waiting period for up to 12 months.
Continuity of Coverage	Yes	Yes	Yes	Yes
Premium Limits	Limited to rate of increase for new business.	Support NAIC reforms.	No provision.	Renewal rates must be the same as that for new issues.
Reinsurance	Not specified.	Calls on NAIC to develop models and states to establish mechanism.	Federal stop-loss pool created and administered by the Secretary.	Calls on NAIC to develop models and states to establish mechanisms.
Federal/ State Role	Basic benefit plan exempt from state mandates.	Basic benefit plan exempt from state mandates.	Pre-empt state mandated benefit laws.	Pre-empt state mandated benefit laws.
	Federal tax on non-complying insurers.	Federal tax on non-complying insurers.	Federal tax on non-complying insurers.	Federal tax on non-complying insurers.

(Continued)

EXHIBIT 2 (Continued)

	Rep. Rostenkowski	Rep. Kennedy	Sen. Benisen	Sen. Chafee
Availability	Guaranteed issue of all coverage for any small business regardless of health status, medical history, or claims experience.	Each small employer would be able to obtain coverage regardless of health risk.	With guidance from NAIC States may choose from several options to achieve guaranteed availability.	Guaranteed issue of model health benefit package to be developed by NAIC and approved by the Secretary.
Renewability	Guaranteed renewability.	Guaranteed renewability.	Guaranteed renewability.	Guaranteed renewability.
Rate Increases	Community rating.	States may establish requirements.	Allowed variations within a block of business.	Allowed variations within a class of business.
Medical Underwriting	Limitation allowed for up to 6 months.	No provision.	Limitation allowed for up to 6 months.	Limitation allowed for up to 6 months.
Continuity of Coverage	Yes	Yes	Yes	Yes

(Continued)

EXHIBIT 2 (Continued)

Premium Limits	Renewal rates must be the same as that for new issues.	States may establish requirements.	Increases limited to the change in an insurer's new business rate for that class plus 5 percent.	Increases limited to the change in an insurer's new business rate for that class plus 5 percent.
Reinsurance	No provision.	States may establish a reinsurance mechanism.	Class of NAIC to develop models and states to adopt one.	Requires NAIC to develop models.
Federal/State Role	Pre-empt state mandated benefit laws. Federal tax on non-complying insurers.	Pre-empt state mandated benefits laws.	Pre-empt state mandated benefit laws for qualified plans. Federal tax on non-complying insurers.	Pre-empt state mandated benefits for qualified small employer purchasing groups. A noncomplying insurer cannot deduct for tax purposes reserves set aside for future liabilities.

SOURCE: National Health Policy Forum, Issue Brief 581, November 1991.

based on high claims cost; and (3) to establish greater premium stability in the small group market. To accomplish these goals, the reform proposals would require the following features:

Availability

Most proposals guarantee the availability of coverage regardless of the health risk presented. Most would guarantee that employers with fewer than 25 employees who seek to purchase health insurance for their employees will not be denied such health insurance coverage even if one or more employees might otherwise be either uninsurable or a high risk. These proposals would also require insurers to cover whole employer groups. That is, neither an employer nor an insurer would be able to exclude individuals who present high medical risks from the group's coverage.

Renewability

Some proposals provide that, once insured, neither the group nor an individual in the group may be denied continued coverage because the group's or the individual's health deteriorates.

Medical Underwriting Restrictions

Some proposals would permit medical underwriting only for the purpose of determining the level of risk in setting premiums. Other proposals permit insurers to use medical underwriting provisions to exclude individuals on the basis of expected risk. Most proposals permit waiting periods for pre-existing conditions of up to six months only for conditions recently diagnosed.

Continuity of Coverage

Most proposals would not allow insurers to deny coverage or apply new pre-existing condition restrictions to an insured individual in a group changing either employers or insurers.

Premium Limits

Insurers would be required to limit the rate of year-to-year premium increases relative to other groups insured by the same carrier. These limits would typically ensure that a group pay no more than a percentage of the average cost of similar groups (i.e., similar demography, geography, benefit design, and industry) for basic coverage.

Similar small group market reforms have been enacted in 15 States and are being considered in numerous other States. Maine enacted legislation limiting the use of pre-existing condition exclusions when persons change from one health insurance plan to another.

Surveys of small employers have found that affordability of coverage is the primary barrier to offering health insurance coverage. In addition, many employers are not interested in offering health insurance given that they often do not need it to attract labor in a low-skill, highly competitive labor market. Given these barriers, some analysts are skeptical of the potential impact of small group market reforms. The experience of voluntary efforts to expand coverage to small employers has been mixed. The Robert Wood Johnson Foundation's Health Care for the Uninsured demonstration projects have enrolled only a small portion of potentially eligible firms. With premium rates that ranged from 25 to 50 percent below market rates, only about one-fourth of eligible small businesses chose to purchase the coverage. In

addition, Oregon's program of encouraging small employers to offer coverage by providing tax credits has enrolled less than one percent of the State's uninsured in 2 years of operation.

Private Reinsurance

Reinsurance mechanisms have been proposed to create an incentive for private insurers to charge affordable premiums. The reinsurance mechanism would compensate insurers for losses above a specified level and protect insurers against large financial losses resulting from the small-employer market reforms. The reinsurance mechanism would ensure that small-employer groups that present a high health risk may obtain a basic set of benefits from private carriers at a rate no higher than 50 percent above standard age and sex rates.

Under this approach, insurers could: (1) reinsure high-risk small-employer groups at a reinsurance premium of 150 percent of average market costs; or (2) reinsure high-risk individuals within groups at 500 percent of average market costs. Because reinsurance would be aimed at employer groups and employees known to be at high risk, and because the premium price would be capped to encourage participation, the cost of the reinsurance will exceed the reinsurance premiums. Losses incurred by the reinsurance mechanism could be financed by the private sector through a broad-based mechanism or by sharing costs among insurers including Blue Cross and Blue Shield, commercial insurers, HMOs, and self-insured groups.

The availability of a reinsurance mechanism would reduce the risk associated with insuring small employers and may reduce the economic disincentives for private insurers to cover persons with high risks. Such a mechanism would

improve access to coverage and affordability of coverage for small employers with high risks. Additional administrative costs would be incurred from the establishment and operation of a reinsurance mechanism. It is unknown whether this mechanism can reduce the cost of insurance enough to significantly improve coverage among small employers.

Mandatory Community Rating

A number of recent proposals have advocated mandatory community rating for health insurance. Recently, mandatory community rating was enacted in Vermont. As business practices, community rating and open enrollment are not new. They have been utilized in various forms for decades, and at one time they were the norm for many health insurers. The principle behind these practices is to provide the widest possible spread of risk to offer affordable coverage to anyone who applies. This is accomplished primarily by pooling many groups and setting an average rate based on their aggregate utilization.

As discussed in the private insurance paper, community rating has given way to experience rating in setting health insurance premiums. As the insurance market has become increasingly fragmented, community rating has received renewed interest. Perhaps the principal reason for this renewed interest is the success these practices have had in providing affordable coverage to the widest number of people.

In order for community rating to be a viable health insurance reform option, everyone, including the self-insured, must be subject to community rating. Community rating can provide the most affordable coverage to the greatest number of groups and individuals as long as pools are large and contain

many good risk groups. Mandatory community rating would likely increase the average cost of insurance, since high-risk persons would be pooled with better-risk persons. This could increase rates for younger workers who might opt to go without insurance instead of paying the higher premium, thereby raising the premium even further.

Risk Pools for Uninsurable Individuals

As community rating has been replaced by experience rating, a large number of individuals have been deemed uninsurable and excluded from the private insurance market. Risk pools have been established in 26 States to provide health insurance to those individuals at high risk for large health care expenses who may be currently excluded from available health insurance plans. A number of proposals for health care reform have suggested requiring all States to enact risk pools. Risk pools remove high-risk individuals from the overall pool of insured individuals, thereby reducing the average premium, yet they provide a source of coverage for high-cost individuals.

Persons who have been rejected for coverage by at least one insurance company typically are eligible for the pool. Participants pay a premium that is usually tied to the premium of a small group or non-group policy. Premiums for risk-pool coverage tend to be substantially higher than average premiums for non-group coverage. These high premiums are to be expected, since the concept of a high-risk pool is to group high health care users into a single pool. To prevent premiums from being set at an unaffordable level, State legislation usually caps the premium rates at 150 percent of the standard individual health insurance premium for comparable coverage. Since individual premium rates are significantly higher than group rates, the

actual cost of risk-pool premiums can be twice as high as standard group rates. Connecticut is the only State which bases the premiums for its high-risk pool on the average group premium rate offered by the insurers in the State. Since the cost of claims tend to exceed premium contributions to the pools, expenses in excess of premium income are generally funded by assessments on all insurers in the State and subsidized through State general revenues.

The high premium and cost-sharing requirements of risk pools often render them unaffordable to those persons they were designed to assist. Only two States—Wisconsin and Maine—subsidize the premium for low-income persons. Even with the subsidy, many persons report that the cost of the risk pool is still too high.¹

The benefits available under a high-risk pool resemble the benefits in standard private insurance plans. Risk-pool coverage usually does not cover home health care, medical equipment, physical therapy, occupational therapy, and personal assistance.

While high-risk pools have made health insurance available to some persons who have been excluded from coverage due to pre-existing conditions, they have had limited success. Some studies have estimated that between one and two million persons are uninsurable; yet only 23,000 persons were enrolled in high-risk pools in 1987.² Almost one-half of these persons were enrolled in the Minnesota high-risk pool, which has the lowest premium. This same study found that risk pools enrolled only 1.7 percent of the target population in Florida, 2.8 percent in Nebraska, 5.4 percent in Indiana, 5.9 percent in

¹ U.S. General Accounting Office, *Health Insurance: A Profile of the Uninsured*. GAO/HRD-88-83.

² Bob Griss, *Access to Health Care*, Vols. 1 and 2, World Institute on Disability, September 1988.

Wisconsin, 24.5 percent in North Dakota, and 33.5 percent of the target population in Minnesota.³

It is questionable whether high-risk pools can be sustained over time. High-risk pools have required increasingly large contributions from private insurers due to increases in enrollment and claims. In addition, risk pools further segment the insurance market by enabling insurers to deny coverage to persons deemed uninsurable. As more persons enroll in the risk pool, the cost to insurers and the State increases. Eventually, these cost increases may be too high to continue support for the pool.

Affordable Coverage for Small-Employer Groups

A number of proposals recommend that insurers be given greater flexibility in designing insurance products for small employers. Because cost is cited as the primary reason small employers do not offer coverage, insurers are seeking exclusions from State mandates in order to develop more affordable insurance products for small firms. Since early 1990, 15 States have enacted laws authorizing insurers to market limited benefit plans, mainly to small employers. Basic health plan bills are under active consideration in at least 10 other States.⁴

The basic benefits laws enacted to date share two common features. The first is a definition of a qualifying small employer that includes limits on the

³ *Ibid.*

⁴ State Health Notes, *"Bare Bones" Insurance Plans: Filling the Small Business Gap*, Intergovernmental Health Policy Project, May 1991.

number of employees in the group (usually 25 employees) and on the time that the firm must have gone without health insurance (usually one year). This latter provision is intended to prevent firms from switching from their current plans into the basic benefit plan.

The second common characteristic is an explicit exemption from having to include some or all of the health benefits mandated under State law. Some States have excluded all existing mandates from the basic plans, and others have permitted partial exclusions. Coverage of alcoholism and substance-abuse treatment is a common exemption, as is reimbursement for chiropractors, podiatrists, and psychologists. While these laws permit exclusions of State mandates, some require coverage of specific services such as well-baby care and some primary care.

Proponents of the basic benefits plans argue that they provide an opportunity for employers previously unable to afford coverage to offer insurance. Opponents of these plans fear that they will lead to an erosion of benefits which will leave many persons uninsured for services they need. Evidence suggests that these plans are not selling well.⁵ It is too early, however, to draw conclusions from this evidence, since these types of products are difficult to market and enrollment often lags.

Tax Assistance to Small Employers

Health insurance represents a greater financial burden to many small employers who hire low-wage workers. For a number of small firms, the

⁵ Micheal deCourcy Hinds, "Insurers' Drive to Sell 'Bare Bones' Health Policy Falters for Lack of Interest," *The New York Times*, November 10, 1991.

cost of providing health insurance may be as high as 30 percent of payroll because even with the small-employer market reforms described above, many small employers, particularly those with low-wage workers, will still not be able to afford coverage. To address this problem, HIAA and Blue Cross and Blue Shield Association have proposed that tax subsidies be made available to some groups of small employers.

The experience of the high-risk pools and the subsidized small-employer products created by a number of States show that subsidies are effective in expanding insurance coverage.⁶ Without subsidies, the risk pools and the small group insurance products experience low enrollment.

Proposals which would reform private health insurance practices largely receive widespread support, since they do not require large public expenditures. These proposals are aimed at providing greater access to affordable insurance and would likely expand coverage for some small employers and increase the stability of coverage for the currently insured. They are, however, unlikely to eliminate the uninsured, since the major barrier of affordability would remain.

⁶ Lewin/ICF, *Evaluation of the Ohio Demonstration Projects to Expand Coverage for the Working Uninsured*, prepared for the Ohio Department of Health, March 1991.

MEDICAID EXPANSION

As States and the Federal Government have debated health care reform initiatives to address the growing problems of the uninsured, Medicaid has emerged as a primary vehicle for expanding coverage. At both the State and Federal levels, Medicaid expansions have been implemented as a means of improving access to care for vulnerable or at-risk groups such as low-income pregnant women and young children. At the same time, many of the major health care reform proposals that call for universal coverage include a prominent role for Medicaid, typically as a complement to expanded employment-based insurance. Under these plans, Medicaid would undergo major expansions and become the primary payer for most low-income and unemployed individuals without access to employment-based health insurance.

Those who favor building on the Medicaid program to expand coverage cite the program's long-term experience as a large insurer for low-income groups and its low administrative costs. However, critics of the Medicaid program caution against relying on it as a major component of health care reform given the program's current shortcomings. Among these are the length and complexity of the eligibility determination processes, the variation in program eligibility requirements and benefits across States, and the notoriously low reimbursement levels.⁷

Despite these inherent difficulties with the program, the past several years have been marked by a series of incremental Medicaid eligibility and service

⁷ Lewin/ICF, *The Health Care Financing System and the Uninsured*, prepared for the Health Care Financing Administration, April 1990.

expansions. Targeted primarily toward at-risk populations of pregnant women, infants, and young children, most of these initiatives were originally available as State options but were subsequently federally mandated for adoption by all States.

The impact of these expansions in terms of improved access are not yet clear: States report an increase in the proportion of newly eligible persons participating in Medicaid, but the enrollment lag is substantial and the extent to which new enrollees are accessing services has not been determined. It is clear, however, that the cost implications for States have been high and increasingly burdensome. To comply with Federal mandates, many States have been forced by budget constraints to enact simultaneous Medicaid cutbacks, including reductions in benefits and provider reimbursement and cutbacks in other non-health social benefits. The difficulty with Medicaid expansion/reform, like that of most health care reform proposals, is finding an acceptable balance between access and cost. This section describes proposals for Medicaid expansion and their potential impact on access and cost.

Expansion of Medicaid may occur along several dimensions: eligibility, services, and reimbursement. While eligibility expansions offer the most direct mechanism for improving access to care to the uninsured, changes in other program components are likely to have an indirect yet substantial influence on the number of persons receiving health services and in the availability of services.

Expand Medicaid Eligibility

Since 1986, successive Medicaid eligibility expansions have substantially increased the number and range of persons eligible for Medicaid coverage. The most significant recent mandate was established in the Omnibus Reconciliation Act of 1990 (OBRA 90), requiring States to phase-in coverage of all children under 19 in families with incomes below 100 percent of poverty beginning in 1991.⁸

Medicaid expansions may serve as incremental reform efforts for some at-risk populations or as part of broad health care reform proposals. This section discusses three forms of eligibility expansions: (1) extension of coverage to persons below 100 percent of poverty, (2) Medicaid buy-in, and (3) Medicaid expansion as a complement to employment-based insurance.

Extension of Coverage to Persons Below 100 Percent of Poverty

Many health care reform proposals have advocated Medicaid expansion to all persons in families with incomes below 100 percent of poverty. This expansion would entail breaking the traditional link between Medicaid eligibility and eligibility for cash assistance programs like AFDC and SSI. All States would be required to implement this expansion in an effort to improve access for the uninsured and standardize program eligibility across the country.

⁸ OBRA 90 extended Medicaid eligibility to children age 6 through 18 (born after September 30, 1983) in families with incomes below 100 percent of poverty. (Coverage is already required for children under age 6 in families with incomes below 133 percent of poverty.) This provision is phased-in such that coverage of children age 18 will be effective in 2002.

Several estimates have been made to analyze the potential impact of this type of Medicaid expansion on access and program costs. Lewin/ICF estimated that with an income eligibility level of 100 percent of poverty, no categorical requirements, and mandated medically needy programs in all States, an additional 13.4 million previously ineligible persons—including some persons currently with non-group insurance—would participate on an average monthly basis (16.6 percent ever enrolled in year).⁹ The new participants would include single persons, childless couples, intact families, and persons newly eligible under mandatory medically needy programs in all States. This estimate assumes that persons currently with employment-based coverage do not drop this coverage to obtain Medicaid. The cost of this expansion was estimated to be \$14.3 billion in 1989 (or \$10.1 billion exclusive of costs related to the mandated medically needy programs).

Similarly, Thorpe, et al. (1989), estimated that about 10.9 million currently uninsured persons and 3.1 million persons with non-group insurance would gain coverage under a Medicaid expansion to 100 percent of poverty.¹⁰ An additional 3.7 million persons would be expected to drop current non-group insurance coverage in favor of Medicaid, presumably because Medicaid offers coverage at no cost. This estimate assumes that all eligible persons enroll. Thorpe estimates the total cost of this expansion to be about \$14.7 billion (1988 dollars).

⁹ This participation estimate is based on an estimate that about 25.1 million people would become eligible for Medicaid. Of these, approximately 66 percent would actually apply and participate in a given year or 53 percent on an average monthly basis. The expected participation rate is based on analyses which have found that the rate of participation in Medicaid varies by age, sex, health status, employment and income. In particular, enrollment is lower at higher income levels. See Lewin/ICF, *The Health Care Financing System and the Uninsured*, April 1990.

¹⁰ K. E. Thorpe, J. E. Siegel, and T. Dailey, "Including The Poor: The Fiscal Impacts of Medicaid Expansions," *JAMA*, Vol. 261, 1989, pp. 1003-1007.

While extending Medicaid to all persons with incomes below 100 percent of poverty has the potential to cover several million additional persons who are currently uninsured, the effectiveness of this expansion is limited by Medicaid's structural deficiencies. Currently, only about 75 percent of those eligible for Medicaid actually participate. The reasons for the gap between eligibility and participation lie in both the complexity of Medicaid's structure and administration and in the decisions of those who are eligible but do not to enroll. Program experience suggests that major obstacles to Medicaid enrollment include long and difficult application forms, lengthy eligibility determination processes, inaccessibility of eligibility offices, and the "welfare stigma" of the program.

Participation is also related to health status, age, and income. The inverse relationship between program participation and family income is of particular importance in estimating the impact of increased income eligibility standards on Medicaid enrollment and costs. A Lewin/ICF analysis estimated that about 82 percent of eligible families with incomes below 75 percent of poverty participate in Medicaid at some time in the year, compared with 55 percent for families with incomes greater than 150 percent of poverty.¹¹ These higher income families are likely to be eligible only part of the year and may view their eligibility as short run, may have other insurance, or may be unaware that they are eligible for the program.

At the same time, expansion of eligibility without regard to categorical eligibility may result in some currently insured persons dropping their non-group or employer-sponsored insurance and participating in Medicaid. Thorpe, et al. (1989), estimates that the fiscal impact of such a displacement, if all eligible persons dropped private coverage, would be an additional

¹¹ Lewin/ICF, *The Health Care Financing System and the Uninsured*.

\$5.75 billion.¹² Some savings to States and localities would be recognized in terms of a reduction in uncompensated care in addition to savings to individuals as a reduction of out-of-pocket costs.

Finally, while a national income eligibility standard reduces some of the eligibility disparity in programs across States, it does not affect the differences in the range of services available among States. It is possible that expanded eligibility may actually increase the State benefit disparity as a result of the increased financial burden placed on States. In particular, States with low-income eligibility thresholds and restrictive categorical requirements would be expected to incur substantial costs as a result of raising the income threshold and eliminating categorical requirements.

The South includes about 35 percent of the nation's poor and about 43 percent of the nation's uninsured.¹³ As such, the Southern States would experience the greatest increase in Medicaid participation and costs, reflecting their current Medicaid income eligibility levels and average incomes, which are lower than in other regions of the country. The Lewin/ICF analyses estimated that about 49 percent of new participants and about 53 percent of costs under a Medicaid expansion to 100 percent of poverty would be borne by Southern States.¹⁴ Recently, States have argued strongly against additional mandated expansions as Medicaid program costs consume an increasing portion of State budgets and States find themselves constrained by tight budgets and competing priorities.

¹² K. E. Thorpe, J. E. Siegel, and T. Dailey, "Including The Poor: The Fiscal Impacts of Medicaid Expansions," *JAMA*, Vol. 261, 1989, pp. 1003-07.

¹³ Lewin/ICF, *The Health Care Financing System and the Uninsured*.

¹⁴ *Ibid.*

The State of Oregon is attempting to address some of these conflicts by implementing a Medicaid expansion in conjunction with several efforts to contain costs. Oregon is committed to improving access to health care for its over-400,000 uninsured residents. To accomplish this goal, the State has proposed that Medicaid be expanded to all persons under 100 percent of poverty, regardless of categorical eligibility. Recognizing the fiscal implications of such a broad expansion of coverage, the State proposed other changes to its Medicaid program to make the expansion viable. The proposed measures include statewide implementation of managed care arrangements for all Medicaid recipients and a redetermination of program benefits via a prioritization process.

Prioritization ranks health care services by condition/treatment pairs using a formula which considers primarily expected outcomes and values. The cost of these services is then actuarially determined, and the State defines covered benefits based on available budget dollars. While the State has been criticized in particular for explicitly rationing services to a medically needy population, it has also been praised for its candid acknowledgement that expanding access to care is important but requires trade-offs, concessions, and creative efforts in order to be financially viable. Oregon's efforts highlight the tough choices that States and the Federal Government must confront if they are to achieve a balance between expanding access and containing costs.

Medicaid Buy-in

Many of the uninsured earn too much money or have assets above the level necessary to qualify for Medicaid, but are not offered or cannot afford employment-based or non-group insurance coverage. Others have Medicaid coverage for part of the year and are uninsured part of the year, largely as a

result of changes in employment status. While unemployed persons may purchase employment-based insurance for 18 months following termination of employment under COBRA, this coverage is often expensive, in addition to being temporary, and may be unaffordable for many persons.

Under a Medicaid buy-in, persons ineligible for Medicaid would be permitted to purchase Medicaid coverage on an income-based sliding fee scale. The buy-in would permit persons who would be otherwise uninsured to obtain coverage and would allow Medicaid recipients who lose coverage due to employment to maintain coverage after the 12-month Medicaid extension lapses.¹⁵

The buy-in concept has been advocated because it provides an opportunity to broaden program coverage to include the working uninsured population. This broader coverage would presumably help change the "welfare stigma" of the program as persons of higher incomes enroll in Medicaid. In addition, a Medicaid buy-in suggests that the low-income who may have some ability to pay can contribute to the cost of coverage and that fully subsidized coverage can be maintained for those most in need.

Lewin/ICF (1990) and Holahan and Zedlewski (1991) analyzed the impact of implementing a Medicaid buy-in. Lewin/ICF estimated the impact of a Medicaid buy-in limited to persons with incomes below 185 percent of poverty.¹⁶ Persons with incomes between the Medicaid eligibility level and 185 percent of poverty would be required to contribute 5 percent of their

¹⁵ AFDC recipients who lose Medicaid eligibility because of increased earnings are eligible for an additional 12 months of Medicaid coverage under provisions of the Family Support Act of 1988.

¹⁶ Lewin/ICF, *The Health Care Financing System and the Uninsured*.

income toward the premium. They would also be responsible for a \$100 deductible and 20 percent co-insurance.

Approximately one-third of the currently uninsured would enroll in the buy-in, in addition to about 2.3 million persons who would drop non-group coverage in favor of the buy-in.¹⁷ This behavior is expected to occur because the cost of the buy-in would be substantially less than typical non-group premiums and the benefits would be more comprehensive. The Lewin/ICF analysis also assumes that persons with Medicaid coverage through spenddown who are now eligible for the buy-in would shift to the buy-in (i.e., they will contribute to the cost of coverage), which would permit them to maintain coverage.

The net cost of the buy-in is estimated by Lewin/ICF to be \$20.7 billion, including an offset of \$2.8 billion from enrollee premium payments and administrative costs estimated to be 6 percent of benefit payments to account for the increased administrative load created by the buy-in. This figure represents a 46 percent increase in Medicaid costs.

Holahan and Zedlewski estimate a 193 percent increase in total 1989 Medicaid costs for the non-elderly when Medicaid is expanded to cover all persons under 200 percent of poverty. This expansion includes a buy-in available to persons with incomes between 100 and 200 percent of poverty where persons are required to contribute 3 percent of their incomes to obtain

¹⁷ Currently uninsured persons were assumed to enroll at the same rate as upper income persons without employer insurance purchase non-group coverage, and all newly eligible persons (i.e., persons with incomes between the Medicaid eligibility level and 185 percent of poverty) who currently purchase non-group coverage were assumed to drop that coverage and purchase Medicaid coverage through the buy-in.

coverage.¹⁸ The increase is 142 percent when enrollees contribute 10 percent of income.¹⁹

The Congressional Budget Office (CBO) conducted an analysis of a similar expansion scheme, except that the buy-in contribution for persons with incomes between 100 and 200 percent of poverty would be the lesser of: (1) 5 percent of all family income above poverty for each covered family member; (2) 10 percent of all family income above poverty; or (3) one-third of total costs of Medicaid coverage for an average family of this size and type.²⁰ This expansion would result in the coverage of an additional 25.3 million persons, including 60.6 percent of those uninsured in 1991.²¹ This reasoning assumes that all eligible persons would participate. Medicaid spending would increase by \$29 billion in 1991, with offset of buy-in contributions of about \$2.6 billion. CBO also estimates that State and local governments would realize savings of about \$3 billion in spending for indigent care and that new Medicaid participants who were previously uninsured would have a net savings of \$10 billion from a reduction in direct out-of-pocket expenditures.²²

While the CBO, Holahan and Zedlewski, and Lewin/ICF analyses are largely incomparable due to differences in eligibility, enrollment, and buy-in contribution assumptions, their conclusions illustrate the potential costliness of implementing a buy-in. While the buy-in does not yield as high an

¹⁸ J. Holahan and S. Zedlewski, "Expanding Medicaid to Cover Uninsured Americans," *Health Affairs* (Spring 1991), pp. 45-61.

¹⁹ *Ibid.*

²⁰ Congressional Budget Office, *Selected Options for Expanding Health Insurance Coverage*, U.S. Government Printing Office, July 1991.

²¹ *Ibid.*

²² *Ibid.*

increase in Medicaid costs as a Medicaid expansion without a buy-in, it is clear that at least at the levels of contribution required under these scenarios, premium revenue raised represents only a small percentage of expected costs. CBO's analysis of the Medicaid expansion and buy-in does suggest, however, that the net increase in national health spending would represent about a 1.7 percent increase from its 1991 level as a result of the refinancing that occurs, since many of the uninsured were receiving health care prior to insurance expansion.²³

One way to potentially reduce this shortfall would be to increase the expected Medicaid premium contribution. However, this increase may reduce expected enrollment, since many of the low-income above 100 percent but below 200 percent of the poverty level may not be able to afford, or may choose not to afford, the higher premium. This idea is reflected in part in Holahan and Zedlewski's finding that the increase in Medicaid program costs is less when enrollees are expected to contribute 10 percent of income than when required to pay 3 percent of income (i.e., fewer persons participate when the contribution is higher, resulting in fewer costs).

Some analysts have suggested offering a reduced Medicaid benefit package for a buy-in for persons with incomes above poverty but below 200 percent of poverty. A scaled-down benefit package would reduce the "premium" cost and, consequently, the expected contributions of individuals and the size of the State subsidy. What is included in this package, however, may also influence individuals' interest and subsequent enrollment.

²³ *Ibid.*

Medicaid Expansion as a Complement to Employment-Based Insurance

Under the broader health care reform proposals aimed at ensuring universal access, Medicaid plays a critical role as a "safety net" to cover all persons not otherwise insured by other program components. Typically these are the low-income, unemployed, and uninsurable. Several recent proposals for health care reform which expand employment-based insurance have included a Medicaid component in the complementary capacity of providing coverage for all persons who do not otherwise have access to employment based insurance. For example, Massachusetts would require employers to provide health insurance to employees working more than 30 hours per week or pay a tax equal to \$1,680. The remaining persons would be covered through expansions in Medicaid. In most cases, some level of premium contribution or cost-sharing is expected on the part of the enrollee.

The attractiveness of this approach lies in its broad coverage potential and its reliance on existing insurance mechanisms—namely, private insurance and Medicaid—for expanding access. For Medicaid in particular, the broad expansion is a means to widen the program's coverage base and ameliorate the "welfare stigma."

The major shortcoming of this approach is that it is unlikely to be self-financing. That is, the tax revenue raised from employers will not be sufficient to meet the additional cost of providing coverage through the public plan. In this event, the State would be expected to bear an increased burden of the costs of the public plan. Under this approach, employers are likely to pay the tax for employees expected to be high risks for health expenses, since the cost of insuring them will be higher than the tax.

Standardize Benefits

Because States have considerable flexibility in determining which services will be covered, where a person lives largely determines the extent of available services. Federal law currently mandates that Medicaid cover certain basic services and allows States discretion in supplementing these basic services with optional services. States thus vary in which optional services they provide and the extent to which they limit the amount, duration, and scope of covered services. There are currently 32 optional benefits available to States. No States offer all optional benefits; a few States have included as many as 28 benefits, while about 20 States cover fewer than 20 of the available options. Furthermore, limits on the amount, duration, and scope of both the optional and mandatory services are largely at the State's discretion, and the variation in limits further highlights the benefit differences among States. The benefit variation across States in conjunction with differences in the eligibility criteria has led some to the conclusion that Medicaid is 50 distinct programs bearing limited resemblance to each other.

In an effort to ameliorate this disparity, it has been suggested in several proposals that the Medicaid benefit package be standardized so that all recipients have access to the same services. Thorpe, et al. (1989), estimated the impact of mandating a standard benefit package for all States. Two sets of benefits were proposed: one would require States to implement a "median" benefit package based on that currently in the State of Washington, and the other would mandate a "high" benefit package such as that available in Minnesota. Under the Washington-type benefit plan, current Medicaid spending would increase by about \$5.2 billion (1988 dollars); under the Minnesota-type plan, expenditures would increase by about \$15 billion.²⁴

²⁴ Thorpe, Siegel, and Dailey, "Including the Poor: The Fiscal Impacts of Medicaid Expansions."

While creating a uniform benefit package for all States would eliminate variations in enrollee access to some services across all States, it would be difficult to achieve. Like raising and standardizing the income eligibility level, mandating a standard benefit package creates particular difficulties for States with current benefit packages substantially lower than the required package. These States would be expected to incur significant expenses in providing the increased package and might be inclined to reduce provider reimbursement rates or tighten eligibility criteria in order to constrain the increase in costs expected from the augmented benefits. Furthermore, standardizing Medicaid benefits alone does not affect the access problems of the uninsured, and without adequate reimbursement and provider participation, Medicaid recipients may not be able to take advantage of the enhanced benefits.

The major barrier that must be overcome in standardizing the benefit package is determining what benefits should be included. The entire set of benefits available under Federal guidelines is probably the most comprehensive package available under any insurance plan; however, there is a tradeoff between expanding benefits and expanding eligibility because of the increased cost associated with either expansion effort. This is illustrated by Oregon's initiative, where the State proposed constraints on benefits, including redefining a basic benefit package, in order to expand access. Developing a "reasonable, adequate" standard benefit package for Medicaid, however, can be a complicated process, since there is little agreement on what should be considered in determining the basic value of a particular service. This dilemma for Medicaid largely reflects the difficulties currently faced in the general health reform debate over a minimum benefit package for insurance plans.

Reimbursement

Evidence suggests that Medicaid reimbursement levels contribute to low provider participation and, thus, limited access to care for Medicaid recipients. Medicaid reimbursement rates have been reported to average about 66 percent of Medicare prevailing charges, ranging from 57 percent of Medicare charges for comprehensive hospital visits to 76 percent for limited and intermediate office visits.²⁵ As a result, many Medicaid expansion proposals have recommended improving provider payment in conjunction with other reforms.

Thorpe, et al., estimate the effect of increasing Medicaid payments in addition to expanding coverage to all persons with incomes below 100 percent of poverty and standardizing the benefit package.²⁶ Their analysis assessed the impact of raising Medicaid reimbursement rates for physicians to Medicare levels and increasing Medicaid payments for hospitals to reflect their costs. Accounting for expected changes in utilization as a result of increased reimbursement, raising Medicaid payments would increase total Medicaid expenditures by \$4.4 to \$5.5 billion.²⁷

While Medicaid payment reform may not directly expand coverage, it is generally agreed that improvement in Medicaid reimbursement levels is an integral component of any effort to improve access to services for current Medicaid recipients and to expand eligibility. It is not clear, however, to

²⁵ A. Schwartz, D. C. Colby, and A. L. Reisinger, "Variation in Medicaid Physician Fees," *Health Affairs*, Spring 1991, p. 136.

²⁶ K. E. Thorpe, J. E. Siegel, and T. Dailey, "Including the Poor: The Fiscal Impacts of Medicaid Expansion."

²⁷ *Ibid.*, p. 1006.

what extent payment levels must be increased to generate a significant increase in provider participation or provider acceptance of Medicaid patients. Furthermore, as States face mandated Medicaid expansions and tightening State budgets, reimbursement is unlikely to be increased and may be reduced. For example, as of January 1991, Michigan reduced reimbursement rates for all ambulatory services by 20 percent in the wake of a State fiscal crisis.²⁸

While the expansions proposed above have the potential to increase access to care to millions of currently uninsured persons, the viability of these initiatives is limited by the extent of financial resources required to ensure full implementation. None of these expansion options can be operationalized without substantial cost to both the Federal and State governments. The cost is related not only to coverage of new previously uninsured persons but also to the enrollment of currently insured persons, many of whom will be persons with expected high health expenses, who shift from non-group or employment-based insurance to subsidized coverage under Medicaid. Given current fiscal constraints, States may be reluctant to support major Medicaid expansions without increased Federal or other financial assistance. It appears increasingly, however, that these monies may be less available as the Federal Government responds to the rapid growth in Medicaid program costs. States have voiced their concerns most recently related to the Federal Government's efforts to restrict the use of voluntary contributions and provider taxes in generating the State's portion of the Medicaid match. The outcome of the debate sparked by this effort can be expected to have important implications for States' abilities to sustain recent program expansions or implement other expansions in the future.

²⁸ National Governors' Association, *State Coverage of Pregnant Women and Children, January 1991*, MCH Update.

THE ROLE OF SCHOOLS IN EXPANDING ACCESS TO CARE

As more children lack access to health care, a question arises as to the best and most efficient mechanism for providing them with services. Schools have often been involved in the identification of communicable disease, hearing and eye problems, immunization, and other health care needs. To maximize their ability to reach children, health services placed near or in schools offer a way to ensure school-age children get needed health care services. This paper discusses these issues and how these efforts might be financed.

Rationale for School-Based Health Initiatives

There is evidence that positive educational and health outcomes can be achieved through effective coordination and delivery of comprehensive health and social services.²⁹ School-based initiatives can expand availability of and access to primary health services. Recently schools have found themselves confronted with a host of social and health problems which are affecting children. The "new morbidities," which include poverty, congenital health problems, and disability, have increased the risk of health-related problems for children, including substance abuse, and poor nutrition.

²⁹ "Promoting School-Linked Approaches to the Delivery of Effective Health and Social Services for Youth and Families," *Concerns*, Issue XXXIII, June 1991, pp. 1-9.

These difficulties appear to be especially severe for the low-income and minority populations who are disproportionately represented among those at risk for health problems and school failure. A nationwide survey of adolescents aged 10-18 found that 41 percent of those in families with incomes below the poverty line reported being in only "good" or "fair or poor" health, while among those in families with incomes above the poverty line, only 19 percent reported "good" or "fair or poor" health rather than "very good" or "excellent" health.³⁰

Several factors appear to be contributing to the growing health problems of children. Children represent a disproportionate number of the uninsured. One-quarter of the uninsured are under age 18, and approximately 17 percent are school-age children between the ages of 6 and 18.³¹ The consequences of lack of insurance are serious for children. Several analyses of national data found that low-income and uninsured children are less likely to receive primary care services than insured children.³² For example, one analysis found that among children with incomes below 150 percent of poverty, uninsured children were more likely to have gone without a physician visit than both those with Medicaid coverage and those with other insurance.³³ Furthermore, among children under the age of 15, the uninsured have an average of one-third fewer physician visits per person per year than those with insurance.

³⁰ P.W. Newacheck, "Improving Access to Health Services for Adolescents from Economically-Disadvantaged Families," *Pediatrics*, Vol. 84, October 1989.

³¹ Lewin/ICF analysis of *Current Population Survey*, March 1990.

³² Lewin/ICF, *The Health Care Financing System and the Uninsured*, report prepared for HCFA, April 1990; M.L. Rosenbach, "The Impact of Medicaid on Physician Use by Low-Income Children," *American Journal of Public Health*, September 1989, pp. 1220-1226.

³³ M.L. Rosenbach, "The Impact of Medicaid on Physician Use by Low-Income Children."

Schools offer a unique opportunity to improve access to health care for children and their families. Because the school maintains a "captive audience" of children, it can be an effective locus for delivery of a set of primary health services. Alternatively, schools can act as a natural pooling mechanism for group health insurance.

While several States have implemented school-based initiatives, there is no single model or consensus over what is the appropriate role of the school. Many educators and others have been reluctant to recommend that the responsibilities of schools extend to assuring that children have access to health care, contending that such a role detracts from the schools' primary educational mission. However, there appears to be a growing acceptance of the part schools can play in helping families to coordinate either education and primary health care services for their children and their families.

Options for School-Based Health Initiatives

School-based health initiatives may be of two designs: direct delivery through school-based health centers or insurance. The viability of these approaches is currently being tested across several States as State and local ventures and demonstration projects. School-based health centers have been established in at least 32 States; school-based health insurance is a relatively recent innovation which has gained attention in light of current efforts to expand access to health insurance. Most of these efforts have been aimed at reaching adolescent populations in which problems related to the "new morbidities" are likely to be manifest, but there is also growing interest in targeting younger children.

School-Based Health Centers

School-based health centers have been proposed as a particularly useful mechanism for improving access to health care by providing a comprehensive set of primary health care services directly to children at school. Currently, most schools provide limited health services to students through school nurses or health offices. Contrary to popular wisdom, few schools employ a nurse or a similar health care practitioner on-site. More often, a nurse visits a school for a few hours each week or several times each month.³⁴ Furthermore, the role of the school nurse or health office has essentially been limited to providing screening services, referrals, and emergency and first aid to children with acute complaints.

As schools find themselves having to cope with an increasing number of students with unmet health care needs such as alcohol and substance abuse, they have been challenged to reexamine their role in assessing and helping families get care for students' health problems. Many of the treatment and assessment services required to deal with these problems tend to be unavailable or inaccessible in the community to children in need. In addition, as increasing numbers of children are in single-parent families or in families where both parents are employed, children's health care needs may go unmet as parents find it difficult to take time off from work to take children to a physician. School-based health centers may be an effective means for helping families obtain care for their children by delivering services on or near the school site.

Overview of School-Based Health Centers. No comprehensive data are available on the number, characteristics, or impact of school-based health

³⁴ *Beyond the Health Room*, Council of Chief State School Officers, 1991.

centers. According to a 1990 report by the Center for Population Options, 153 school-based health centers were operating in middle, junior, and senior high schools.³⁵ However, this report fails to identify many school-based centers including over 100 school-based centers operating in New York State.

Most school-based health centers are located in low-income, high-risk communities and deliver care on-site. By providing care on-site, school health centers can serve an important oversight and coordination function for their patients. Advantages of school-based health centers include convenience and accessibility, ease in providing follow-up, integration with other school functions (especially health education), and the opportunity to address health problems particular among specific subsets of the school population, such as hypertension which is common among blacks and often manifest in adolescence.³⁶ The extent to which school-based centers are effective in these areas depends on several factors including the level of services provided, coordination among school staff who may encounter and be expected to identify children with health problems, collaboration with outside organizations which might provide certain services, and parental support.

Existing administrative capacity in schools, such as record keeping, may facilitate patient tracking and follow-up. In addition, some schools can provide the physical space necessary to establish a center, thus minimizing program start-up costs. However, if a school does not have existing capacity to house a center, it could be required to incur substantial cost to develop appropriate space.

³⁵ H.J. Hyche-Williams and C. Waszak, *School-Based Clinics: Update 1990*, Center for Population Options, 1990.

³⁶ *Turning Points: Preparing American Youth for the 21st Century*, Carnegie Council on Adolescent Development, June 1989.

In contrast to the traditional school nurse and health office model, school-based health centers rely on a range of health care practitioners, often including the school nurse, to provide a continuum of care. The enhanced group of providers may provide a range of services including general preventive and primary care, such as routine physicals, treatment for illness and injury, and follow-up care and consultations, in addition to services traditionally provided by school health offices, such as vision and hearing screenings. The scope of services to be delivered necessarily depends on the particular needs and concerns of the community which is considering operating a school-based center. In New Jersey, for example, the New Jersey Department of Human Services' School-Based Youth Services Program (SBYSP), which links the education and human services systems in 29 grantee counties across the State, has no single statewide model for the specific services offered, except that all services must be provided at one site and that all projects must provide mental health and family counseling and health and employment services.

The centers may be sponsored by school systems themselves, but are more often sponsored by outside agencies or health providers such as public health departments.³⁷ Collaboration between the school and relevant State agencies and other community agencies, as well as parental involvement, appears to be critical to the success of school-based health initiatives, particularly in terms of generating financing. In New Jersey, SBYSP schools were certified as Medicaid providers by the State Department of Human Services to facilitate Medicaid reimbursement.³⁸

³⁷ H.J. Hyche-Williams and C. Waszak, *School-Based Clinics: Update 1990*.

³⁸ "Promoting School-Linked Approaches to the Delivery of Effective Health and Social Services for Youth and Families," *Concerns*.

Experience of School-Based Health Centers. Because of the wide range of centers and a lack of data on the overall experience of school-based centers, it is difficult to detail a comprehensive picture of the system of school-based clinics. It may be useful, however, to examine the experience of a large, well-established school-based health program, such as the New York School Health Demonstration Project (SHDP), which may provide some important insights to the potential of school-based health centers.

Implemented in 1981 as a coordinated effort of the New York State Departments of Health, Education, and Social Services, the SHDP was designed to improve access to primary and preventive health care to children in low-income, high-risk communities. In the 1981-1982 school term, nine grants were awarded to neighborhood health centers and hospital ambulatory care centers to provide primary and preventive care using health care teams in 40 elementary and junior high schools, pre-schools, and Head Start and day care centers.³⁹ In 1984, and in subsequent years, high schools were added to the scope of delivery sites. Since 1987, the program has grown to provide \$6.6 million to 23 providers maintaining 102 school-based clinics.⁴⁰

The program grantees are responsible for staffing affiliated schools with a health aide, a mid-level practitioner (physician's assistant or nurse practitioner) with pediatric experience, and a pediatrician or family practitioner who acts as a "preceptor," visiting schools or centers on a regular schedule and consulting with team members on more complicated cases.⁴¹

³⁹ Welfare Research, Inc., *Evaluation of the New York State School Health Demonstration Programs*, final report submitted to the New York State Department of Health, September 1986.

⁴⁰ Interoffice memo to Paul Tenan, Director, Bureau of Ambulatory Care Reimbursement from Michelle Cravets, Director, School Health Program, Bureau of Child and Adolescent Health, January 9, 1991.

⁴¹ Welfare Research, Inc., *Evaluation of the New York State School Health Demonstration Programs*.

Services offered on-site include:

- outreach and health education to both students and parents;
- disease prevention and health promotion activities, including immunizations, vision and hearing screenings;
- diagnostic and treatment services to address detected health or mental health problems; and
- referral to off-site specialty and support services.

All children enrolled in the participating schools and day care or Head Start centers are eligible to receive services under the SHDP. Parental or guardian consent is required for participation; however, routine school health services (such as vision and hearing screening, general and follow-up first aid, and care for minor complaints) continue to be available to all students. Parents can enroll children in one of three levels of care:

- Level 1: usual school health services (e.g., vision and hearing screenings, first aid);
- Level 2: level 1 plus complete physical examination, including laboratory tests; or
- Level 3: level 2 plus care for acute and chronic illness.⁴²

⁴² *Ibid.*

As of 1991, a total of 107,252 students received care through this school health program. While current information on the distribution of services used was not available, a 1986 evaluation of the program based on data from the 1983-1984 school term found that 34 percent of the student body visited the SHDP health office for reasons other than mass screening.⁴³ Most problems identified by SHDP practitioners were treated on-site; only 6 percent of the SHDP encounters led to referrals to other providers. In total, about one-third of all services provided at both the elementary and junior high school levels and about one quarter of direct services provided at pre-schools were for primary care.

The 1986 evaluation credited the SHDP with detecting numerous health problems that may have been detected previously, but had gone untreated. The evaluator also found that among third graders, children enrolled in the SHDP were more likely to have had a comprehensive physical examination during the 1984-1985 school year than children who were not enrolled.⁴⁴

Other evaluations of school-based centers have reported similar findings. The centers surveyed as part of the Center for Population Options study reported an average of about 2,000 visits per year in 1989, with a range of 116 to 6288.⁴⁵ An evaluation of 22 school-based centers funded by the Robert Wood Johnson Foundation found that the most frequent referrals were for physicians, laboratory, and dental services. However, completion rates for these referrals were 64 percent, 96 percent, and 74 percent, respectively.⁴⁶ These findings may suggest that school-based centers have

⁴³ *Ibid.*

⁴⁴ *Ibid.*

⁴⁵ H.J. Hyche-Williams and C. Waszak, *School-Based Clinics: Update 1990*.

⁴⁶ C. Brandis, *A Review of Utilization Patterns in Clinics Funded by the Robert Wood Johnson Foundation*, San Francisco, Institute for Health Policy Studies, 1990.

limited effectiveness in promoting diagnosis and treatment in some areas. At the same time, however, it may be argued that in the absence of the school-based health center, few of the problems for which referrals were made would have been identified and, consequently, even fewer would have been treated.

School-Based Health Insurance

Another school-based health initiative that is receiving increased attention is school enrollment-based health insurance. The appeal of using the school as a group for insurance purposes is based on the presence of many uninsured and underinsured school-age children and the potential for schools/school districts to offer a large population of eligibles over which to spread risk. In addition, since the school-enrolled cohort is young and relatively healthy, fears of adverse selection can be largely assuaged.⁴⁷

While some insurers have already targeted the school as an attractive group market for some insurance policies, such as gap-filling hospitalization and accident coverage, the concept of comprehensive school-based health insurance is a relatively new idea which has been advanced only in the past several years.⁴⁸ School enrollment-based insurance is advocated for its potential to enhance access to care and improve school attendance and performance.

Structure of School-Based Health Insurance. The base of a large, young risk pool facilitates the possibility that a comprehensive health benefit

⁴⁷ S.A. Freedman, B.R. Klepper, R.P. Duncan and S.P. Bell, III, "A Proposal for School Enrollment-Based Health Insurance," *The New England Journal of Medicine*, Vol. 318, March 31, 1988, pp. 843-846.

⁴⁸ *Ibid.* In fact, Freedman, et al., are largely credited for the advancement of the comprehensive approach.

package can be designed to meet the specific needs of the target population (i.e., children) and offered at a reasonably low premium. School-based health insurance could also be made available to provide "wrap-around" coverage to currently insured children. Many private health insurance plans are limited in their coverage of primary and preventive services needed by children. A school-based health insurance plan could be designed with a reduced benefit package or a coordination component permitting its use as supplemental coverage for persons with limited policies.

The promise of this approach depends largely on the extent to which insurance can be priced low enough to be affordable. While recent Medicaid expansions may reduce the number of uninsured very low income children (i.e., in families with incomes under 100 percent of poverty), there will remain a substantial number of school-age children in low-income families without the resources available to purchase insurance. In 1989, about 25 percent of uninsured children were in families with incomes between 100 and 200 percent of poverty.⁴⁹ Many of these low-income families may not be offered and/or cannot afford the price of insurance. If the product is targeted to meet the needs of the currently uninsured population, it will need to be priced to reflect the purchasing capability of a low-income population. It may then also be necessary to develop a product which can be subsidized on an income-based sliding scale to ensure affordability.⁵⁰

Covered benefits are also an important component, affecting a plan's price and attractiveness to consumers. A comprehensive benefit plan, while likely to be more appealing to parents, will result in a more costly product. At the same time, however, to the extent that the insurance plan is also intended to

⁴⁹ Lewin/ICF analysis of *Current Population Survey*, March 1990.

⁵⁰ S.A. Freedman, et. al., *A Proposal for School Enrollment-Based Health Insurance*.

be available as a "wrap-around," a wide range of services may best meet the needs of both uninsured and underinsured eligible children.

The role of the school in administering an insurance plan must be clearly defined; administering most aspects of a plan, including eligibility determination and premium collection, could be resource intensive and costly for a school system. Commitment from providers must also be assured to ensure that care will be available and provided to newly insured individuals. This may involve negotiating with area providers to develop a provider network for the insurance plan and ensuring that reimbursement for covered services is adequate to attract and retain providers.

Experience of School-Based Health Insurance. To date, there is little experience with school-based health insurance. The first implementation of this approach is scheduled to occur in the fall of 1991 in Florida. Early in 1990, the Florida Departments of Education and Insurance urged the State legislature to establish the Florida Healthy Kids Corporation in response to the apparent growing health needs of Florida's children.⁵¹

Under grants from the Federal Bureau of Maternal and Child Health and the Robert Wood Johnson Foundation, the University of Florida's Institute for Child Health Policy began research and development for a school-based health insurance product. The Florida legislature subsequently enacted the Healthy Kids Corporation Act, effective July 1, 1991.

The Florida Medicaid program, the Institute for Child Health Policy, and the Healthy Kids Corporation submitted a proposal to HCFA under a demonstration project for extending health insurance coverage to children

⁵¹ Florida Healthy Kids Corporation, *Interim Report: 1991*, Florida Healthy Kids Corporation.

using Federal Medicaid dollars. This program was approved by HCFA and will yield about \$7 million in Federal funds over 4 years.

The Florida Healthy Kids program offers a comprehensive set of benefits to children ages 5-19 (enrolled in kindergarten through 12th grade) who have been uninsured for the last six months and are not covered by Medicaid or other public health insurance. These insurance-related requirements are aimed at discouraging families from dropping or switching coverage to enroll in the program. Premiums are set on an income-based sliding scale such that premiums are subsidized for families with incomes below 185 percent of poverty. Families with incomes below 100 percent of poverty pay no premium, while families with incomes above 185 percent of poverty are currently expected to pay a monthly premium of \$60 per child.

Covered services and related copayments include:

No copayment:

- primary care and specialist office visits;
- inpatient hospital (if authorized);
- diagnostic testing;
- surgeon fees (if authorized);
- outpatient surgery;
- vision and hearing screening;

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- maternity care (if authorized);
 - emergency ambulance service;
 - chiropractic services (with limits);
 - podiatry services; and
 - durable medical equipment (if authorized).

Small copayment (\$25 or less):

- prescription medications;
- prescription eyeglasses;
- physical or speech therapy;
- emergency room visits (no copayment if sent by primary care physician); and
- mental health outpatient visits.

In the pilot district (Volusia County), services will be provided by a designated HMO with 29 primary care and 70 specialty care providers. Three other pilot sites will open as funding becomes available, with care to be provided presumably with networks of area providers.

The experience of the Florida Healthy Kids Corporation should prove instructive in terms of providing preliminary evidence as to the effectiveness

of the school-based insurance approach in promoting access to care. It will also provide important lessons as to the components of the product which improve or detract from its success.

Financing School-Based Initiatives

A major factor in the success of any health care expansion effort is the availability and sustainability of sufficient financing. Sustained financing is particularly important for efforts aimed at improving access for the low-income uninsured and underinsured whose primary reason for not currently purchasing health care or insurance is price.

With a growing Federal deficit and State fiscal crises, the pool of funding available for expansions is increasingly constrained. The school-based initiatives described here rely largely on State appropriations and allocations from Federal block-grant funds. Other private support, such as gifts or grants, has yielded significant funding for school-based health centers.⁵² It is unlikely, however, that private sources will yield sustained funding. Because of funding limitations, States are seeking other methods for financing care.

Medicaid can be an important source of funds for schools in which the student population has a high proportion of Medicaid-eligible children.⁵³ As the most recent Federal mandates for Medicaid expansion are implemented, more children will become eligible for coverage, increasing the potential for

⁵² *Ibid.*

⁵³ P. McManus, H. Fox, and P. Newacheck, *Adolescent Financing Issues: A Technical Assistance Memorandum*, Summer 1991.

Medicaid to be a key financing mechanism for school-based services. However, New York State reported that Medicaid coverage appears to be less available to children enrolled in school health programs. Evidently in 1990, school-health projects in New York were reporting an increase in the percentage of children either ineligible for Medicaid or whose parents refuse to approach Medicaid.⁵⁴ Refusals have been attributed primarily to the immigration status of some families but have also been related to families' refusals to release Medicaid information to the schools. Nonetheless, this finding of reduced access to Medicaid is surprising given recent Medicaid expansions.

To affect Medicaid reimbursement, school health programs must also ensure that they meet State-specific Medicaid requirements related to the qualification of participating practitioners or the school-based health center itself as Medicaid providers. School health programs must also clearly define services to comply with State Medicaid rules related to the amount, duration, and scope of services provided. Structuring the types of services available and the delivery mechanism in such a way as to meet State criteria for Medicaid reimbursement can help optimize the availability of those resources. However, obtaining third-party reimbursement also requires establishing a billing capacity. Many school-based health centers have access to this capacity through their linkage with established health care providers, such as hospitals or community health centers.⁵⁵

The ability for school-based centers to obtain reimbursement through children's private insurance is limited by the fact that most private plans do

⁵⁴ Memo to Paul Tenan.

⁵⁵ P. McManus, H. Fox, and P. Newacheck, *Adolescent Financing Issues: A Technical Assistance Memorandum*.

not cover preventive services and restrict reimbursement to physicians, hospitals, and a few non-physician providers (e.g., psychologists, physical therapists).⁵⁶

Financing the school-based health insurance program would depend primarily on the collection of insurance premiums and State appropriations for subsidies for the low-income. The viability of school-based health insurance arrangements will be contingent on the premium revenues being sufficient to cover claims outlays. State and Federal Medicaid funds could be available to finance the purchase of insurance for some persons if a buy-out provision were established, permitting States to purchase the privately-offered coverage if it were expected to be cost-effective compared to Medicaid coverage.⁵⁷

Early experience with school-based health initiatives suggests that schools can be an effective mechanism for expanding access to health care. By acting as a locus for health care delivery or risk pooling, schools offer a means for targeting health care to meet the special needs of children. However, the extent to which schools play a major role in health care reform will depend largely on sustained financing and increased recognition of the growing needs of families.

⁵⁶ *Ibid.*

⁵⁷ Florida is receiving Federal Medicaid funds under a special HCFA demonstration program.



STATE INITIATIVES TO EXPAND ACCESS TO CARE

Over a dozen universal health insurance proposals are being considered by State legislatures, and, even more commissions and task forces have been established to study the issue. Three States have enacted programs to achieve universal coverage, while a number of States have implemented incremental approaches targeted toward particular segments of the population. However, implementation of initiatives has slowed due to severe fiscal constraints. Many States are now finding it difficult to meet their commitments to current programs and are reluctant to undertake new reform efforts. As a result, cost containment is re-emerging as a central issue in the debate over health care reform. States do not believe they can expand access to care without first gaining control over spiraling health care costs.

This paper describes the reform options that have been enacted or are being considered at the State level. It first discusses the universal reform proposals and then presents the targeted reform options which have been adopted.

Universal Health Care Reform Proposals

The universal health care reform proposals all share a commitment to ensuring that all State residents obtain access to health care. They depart, however, in the means to achieving universal health coverage. This section presents an overview of the universal proposals under consideration and specifically discusses the plans adopted in the three States with legislation for universal health coverage—Hawaii, Massachusetts, and Oregon.

To date, 18 State legislatures and the District of Columbia are considering proposals or reviewing plans for universal health insurance.⁵⁸ These proposals all share several common features and, in many respects, mirror the Canadian health system. These features include:

- establishment of a single-payer, publicly financed system of care;
- provision of a comprehensive set of benefits including hospital and physician services, mental health care, home health care, prescription drug coverage, rehabilitation, and substance abuse treatment;
- integration of cost containment strategies which reimburse institutional providers based on a global budget. Individual provider reimbursement options include fee-for-service (based on a fee schedule), salary, or capitation; and
- creation of financing arrangements which maintain current financing commitments (Medicaid, employers, etc.) and raise new revenue through increased taxes.

While none of these proposals has been implemented, variants of universal coverage that build on the existing systems of insurance have been adopted in Hawaii and Massachusetts. These States require employers to provide coverage for their employees. Hawaii mandates employer coverage, and Massachusetts has enacted legislation to levy a tax penalty on employers who do not provide insurance. Each of these State programs is described below.

⁵⁸ Intergovernmental Health Policy Project, "Universal Insurance, Canadian-Style: States Starting to Explore the Option," *State Health Notes*, April 1991.

Hawaii Prepaid Health Act of 1974

The State of Hawaii was the first State to require all employers to provide health insurance for eligible employees. Under this plan, employers must offer health insurance coverage to employees working more than 20 hours per week for at least 4 consecutive weeks. Coverage for dependents is optional. The law requires both employers and employees to contribute to health insurance premiums, with the employer paying at least one-half, and the employees limited to paying 1.5 percent of their monthly gross earnings. Employers are required to provide at least 120 days of hospitalization, medical and surgical care, and maternity care as minimum benefits. Persons who receive public assistance or are covered as dependents on other plans and those who receive Federally established health insurance are exempt from eligibility.⁵⁹

The potential for other States to enact similar legislation is limited, given the passage of the Employee Retirement Income Security Act (ERISA) of 1974. In 1980, Hawaii's act was challenged in light of the ERISA provisions exempting self-insured firms from State mandates. The U.S. Supreme Court ruled against Hawaii, sustaining a lower court ruling that found that Congress intended broad preemption of State regulation and did not provide an exemption for employer-mandated State laws.⁶⁰ Hawaii's response to this ruling was to seek a change in Federal legislation. Congress granted Hawaii an exemption from ERISA as it related to the Prepaid Health Care Act. The exemption is limited to the Hawaii program and only as it existed on September 2, 1974 (except for changes in administration), and further states that the amendment shall not be considered a precedent with respect to

⁵⁹ Lewin/ICF, *The Health Care Financing System and the Uninsured*, prepared for the Health Care Financing Administration, April 1990.

⁶⁰ Lewin and Associates, *State Options for Addressing Catastrophic Health Expense*. Prepared for the National Center for Health Services Research, April 1983.

extending such an amendment to any other State law.⁶¹ These limitations were enacted to ensure that other States did not follow Hawaii's lead.

Prior to the enactment of the Prepaid Health Care Act, five percent of Hawaii's population was estimated to be uninsured. This rate dropped to under two percent in the years following the enactment, but has increased recently. Despite the employer mandate, an estimated 5-9 percent of the population still lacks health insurance. These are individuals unattached to the work force or excluded from coverage because they are part-time or seasonal employees or dependents of workers.

To extend coverage to this population, in 1990 the State passed the State Health Insurance Program (SHIP) designed to fill the gaps between Medicaid and private insurance. SHIP is administered by the State and eligibility is restricted to State residents with incomes below 300 percent of poverty who have not been covered by health insurance in the last 3 months and who are ineligible for public insurance. The program places an emphasis on preventive and primary care and makes the insurance premium available on a sliding scale.

Massachusetts Health Security Act of 1988

In 1988, the Massachusetts legislature enacted the Health Security Act, which was intended to ensure universal coverage for all State residents by 1992.⁶² The Act targeted the State's 600,000 uninsured residents through a two-tiered approach which includes the creation of employer tax incentives to provide coverage and public programs to fill in the gaps in coverage. The components of the law are discussed below.

⁶¹ *Ibid.*

⁶² Massachusetts General Laws, Chapter 23 of the Acts of 1988.

Employer tax incentive ("play or pay"). Employers with more than six employees must make a "medical security contribution" to a State fund to provide coverage for employees working more than 30 hours a week and their dependents. For those employers who do not provide insurance, the contribution is a 12 percent surcharge on the first \$14,000 of wages, with a maximum payment of \$1,680 per employee. Those who provide insurance coverage must pay an amount equal to \$1,680 minus the average yearly premiums spent per employee.

Tax credits for small employers. Tax credits are provided for small employers, new firms, and those who can prove that providing health insurance is a financial hardship. Employers with fewer than 50 employees who have not offered health insurance in the past three years and begin to do so are eligible to receive a two-year tax credit (equal to 20 percent of the first year's premium cost). A Hardship Trust Fund exists to assist small businesses whose payments to the State fund would exceed 5 percent of gross revenues.

Public programs and regulations. Several programs target those uninsured persons who cannot obtain employment-based coverage and are ineligible for Medicaid:

CommonHealth. This comprehensive benefit program was implemented in June 1988, and targets those moving off AFDC due to employment, employed persons with disabilities, and working parents of children with disabilities.

Centercare. Initiated in May 1989, Centercare provides free primary care services through a system of community health centers to those below 200 percent of poverty.

Student Health Mandate. Enacted in September 1989, this law mandates that all students obtain health insurance through their college or university.

The economic and political climate of Massachusetts has changed dramatically since the law was passed, and it is uncertain whether it will be fully implemented. Unemployment in January 1991 was 8.6 percent in Massachusetts, much higher than the 2.9 percent rate in April 1988.⁶³ In this economic climate, many in the State are questioning the wisdom of levying a new tax on business. Moreover, the change in Administration has brought about an erosion of political support for the law. Implementation of the employer tax incentive has been delayed three years until January 1, 1995. Governor Weld has proposed legislation to repeal the employer tax incentive, and many believe the State legislature will enact this legislation or at least obtain a further delay in implementation.

Many States and the Federal Government will pay close attention to whether and how Massachusetts implements this law, since features of the law are being considered by Congress, other States, and several interest groups. The Pepper Commission and the Democratic leadership in the U.S. Senate proposed plans similar to the Massachusetts approach. At the State level, Washington, Delaware, and New Jersey are considering "play or pay" approaches.

Oregon Basic Health Services Act

In an effort to address the growing number and problems of the uninsured and underinsured in the State, the Oregon legislature enacted five pieces of legislation in 1989 and 1991 known collectively as the Oregon Basic Health Services Act, designed to provide a comprehensive strategy to improve

⁶³ Richard Kronick, "Can Massachusetts Pay for Health Care for All?" *Health Affairs*, Spring, 1991.

access to health insurance. The State's approach relies not only on the expansion of public programs, but also on private sector participation, particularly by employers and insurers.

Senate Bill 27 (Oregon Medicaid Demonstration) extends Medicaid to all persons in families with incomes below 100 percent of poverty regardless of categorical eligibility through a system of managed care. This Senate bill also mandates the development of a prioritized health service list from which a set of basic benefits will be determined that will serve as the Medicaid benefit package as well as the basic benefit package employers will be required to offer under Senate Bill 935.

Senate Bill 935 requires all employers to offer a basic health insurance package to their employees or pay a tax by 1994. Senate Bill 534 establishes a State-subsidized risk pool for uninsurable persons. Senate Bill 1076 establishes insurance market reforms designed to make health insurance more available and affordable to small employers. Senate Bill 1077 establishes a data and cost review commission designed to contain health care costs as the above insurance expansions occur.

The Oregon plan has received a lot of attention recently related to the Medicaid demonstration component extending Medicaid to all persons with incomes below 100 percent of the Federal poverty line and establishing a prioritized list of health services. The State has submitted a request to HCFA for a waiver of Federal regulations which would permit the State to implement this expansion as a demonstration, so that Federal matching funds would be available for the extension of coverage to the newly eligible population. If the waiver is not approved, the State has stipulated in Senate Bill 935 that the mandate for employers to provide insurance will not be implemented. It is unclear whether the other efforts would be affected.

The prioritization process and the development of the set of services that would be covered under this Medicaid extension have been the subject of recent controversy, as many have argued that the eligibility expansion appears to be possible only in conjunction with an unprecedented reduction in benefits from what the State currently offers under Medicaid to a low-income population composed primarily of women and children. Oregon contends that the demonstration design reflects a recognition that comprehensive coverage of the uninsured cannot realistically occur in an environment of unmanaged care and rising expenditures. The debate over the Oregon Medicaid demonstration has highlighted the difficulties faced by States and nationally in efforts to expand access in an environment of rising health care costs and constrained State and Federal budgets. The potential approval of the State's waiver request is being watched closely as the future of the Oregon Medicaid demonstration is likely to provide important lessons for other States and the Federal government considering comprehensive approaches to extending access and contemplating the trade-offs between expanding access to care and containing costs.

Targeted Expansions in Access

Most of the expansions in insurance coverage and access to care at the State level have been incremental reforms which build on existing programs. These targeted approaches include a broad array of strategies used by States to direct expansions to specific vulnerable populations. This discussion is divided into three sections: public programs, public/private partnerships, and demonstration programs.

Targeted Public Initiatives

These initiatives are financed entirely from public funds and are usually directed to vulnerable populations such as pregnant women, children, and persons with disabilities. Examples of these initiatives are presented below.

Pregnant Women, Infants, and Children. Most State expansions for pregnant women, infants, and children have occurred through the Medicaid program. As discussed earlier, States are required to provide coverage for pregnant women and infants in families with incomes up to 133 percent of the Federal poverty level; States have the option to provide coverage up to 185 percent of poverty. Eighteen States have raised eligibility for pregnant women and infants to 185 percent of poverty. Federal law requires States to cover children under age 6 in families with incomes below 133 percent of poverty. Most recently, Congress mandated Medicaid expansion to older children up to age 18 in families with incomes below 100 percent of poverty. This new provision will be phased-in over several years so that the age limit is raised by one year each year until all children under age 18 in families with incomes below 100 percent of poverty are covered by 2002.

Further public expansions for these populations have focused on ensuring coverage for older children excluded from the Medicaid program and ensuring that appropriate services are available. For example:

Colorado Children's Health Plan: This program provides ambulatory health care for low-income children ineligible for Medicaid. The State pays \$156 per child and collects enrollment fees of \$25 per child.⁶⁴

⁶⁴ Intergovernmental Health Policy Project, "Highlights," *State Health Notes*, June 1990, p. 8.

Maine Health Program: This program provides State-sponsored health insurance to children in families with incomes under 185 percent of poverty and adults under 95 percent of poverty who are not eligible for Medicaid.⁶⁵

Minnesota Children's Health Plan: This program covers those children under age 18 in families with incomes below 185 percent of poverty who are ineligible for Medicaid. The program is funded by a portion of the cigarette tax and enrollment fees of \$25 per child.⁶⁶

Washington's Children's Health Program: This Bill proposes to provide medical care to children under age 18 who live in families with incomes below poverty who are not eligible for Medicaid.⁶⁷

New Jersey Maternal Outreach and Managed Services Program (MOMS): This program is intended to ensure universal access to prenatal care services for all State residents. State subsidies are financed through the Uncompensated Care Trust.⁶⁸

New Jersey Catastrophic Illness in Children Relief Fund: This program is available for children whose uncovered health care expenses total over 30 percent of family income if family income is under \$100,000 or over 40 percent of family income if family income is over \$100,000. The fund is financed by a \$1 surcharge per employee on employers' unemployment compensation payment.⁶⁹

⁶⁵ Debra J. Lipson, *Recent State Initiatives for Covering the Uninsured*, Intergovernmental Health Policy Project, Washington, D.C., February 1989.

⁶⁶ *Ibid.*

⁶⁷ Health Insurance Association of America, "Legislation Pending or Passing at Least One House as of May 1990," *HIAA on Health Care Financing for All Americans*.

⁶⁸ Molly Joel Caye, news release, New Jersey Department of Health, December 4, 1989.

⁶⁹ Debra J. Lipson, *Recent State Initiatives for Covering the Uninsured*.

North Carolina Rural Obstetrical Care Pilot Program: This program encourages family physicians and obstetricians to practice in underserved areas by subsidizing their malpractice premiums.⁷⁰

Persons with Disabilities. Persons with disabilities have also been targeted through State efforts to expand coverage. Most of these initiatives are targeted toward working persons with disabilities and are designed to reduce work disincentives. Many of these persons would lose public coverage if they accepted employment and might not be able to obtain employment-based health insurance due to medical underwriting or pre-existing condition exclusions. To address these concerns, two States have created public programs for persons with disabilities:

Connecticut Subsidized Non-group Insurance Product for Persons with Disabilities: Enacted as part of the recommendations of the Blue Ribbon Commission on Health Care and Health Insurance, the State would subsidize the premiums of a private insurance product for persons who are limited in one or more major activities and have incomes between the SSI eligibility level and 200 percent of poverty. Enrollment in the program would be capped at a level dependent upon the availability of subsidy funds. The program has not yet been implemented.⁷¹

Massachusetts CommonHealth Extra: Enacted as part of the Health Security Act, this program serves as a Medicaid buy-in for disabled adults who would qualify for SSI if they did not work, are ineligible for Medicaid, or are not offered coverage by their employers.⁷²

⁷⁰ *Ibid.*

⁷¹ Remarks of Senator Cynthia Matthews to the National Council on Disability, June 18, 1991.

⁷² Debra J. Lipson, *Recent State Initiatives for Covering the Uninsured*.

Targeted Public/Private Partnerships

Many States have worked with the private sector to expand access to insurance. These initiatives tend to be directed toward improving the availability and affordability of insurance for small employers and high-risk individuals. They include health insurance market reforms, basic benefits plans for small employers, and risk pools for high-risk individuals. The paper on health insurance reforms for small employers and high-risk individuals described each of these approaches in detail. This section will briefly summarize the approach and present a few specific State examples.

Health Insurance Market Reforms. Small group insurance market reforms have been proposed in a number of States to improve the availability and affordability of insurance for small employers. As described in the paper on health insurance reforms, the reforms include provisions for limiting pre-existing condition exclusions and placing limits on premium rate increases for small employers. The proposed reforms include:

Connecticut Small Group Market Reforms: These reforms include guaranteed availability of coverage, renewability of coverage, limits on the rate of premium increases, and limits on medical underwriting.

Iowa Health Insurance Reforms: These reforms require insurers to group small businesses into large groups for rate-setting purposes, place limitations on rate increases, eliminate waiting periods and pre-existing condition exclusions, and guarantees renewal of coverage.

Maine Limits on Pre-existing Conditions: Maine has implemented legislation limiting the use of pre-existing condition clauses when persons change from one insurance plan to another and preventing the elimination of bad risks from a group.

Minnesota Reform Proposals: The Minnesota State legislature recently passed legislation that would prohibit pre-existing condition exclusions and require State-wide community rating. The law was vetoed by the Governor.

Vermont Mandatory Community Rating: Vermont recently enacted legislation requiring mandatory community rating for all insurers.

Basic Benefit Plans. In 15 States, the legislatures have permitted the creation of "bare bones" basic benefit plans which are exempt from State mandates. These plans are intended to permit the development of low-cost products that are more affordable to small employers. Two illustrative examples of specific State basic benefit plans are provided below.

Oklahoma Basic Benefit Plan: This plan is offered to employers who have been in business in Oklahoma for at least one year and who have not offered coverage as of May 1, 1990 to at least 75 percent of employees. Employers are required to pay 50 percent of the premiums. Employees are responsible for the remaining 50 percent. Dependent coverage is offered at full premium to employees. Basic benefits include hospital and physician care, limited mental health benefits and substance abuse services, organ transplantation for kidney, cornea, and bone marrow transplants, and limited prescription drug coverage. Pre-existing condition exclusions apply for the first 90 days.⁷³

Virginia Basic Benefit Plan: This plan was created by Blue Cross and Blue Shield and includes a \$50,000 annual limit on benefit payments. The plan pays 80 percent of costs on maternity and well-baby services with a \$250 deductible, outpatient services including surgery, and home

⁷³ Intergovernmental Health Policy Project, "OK Basic Health Plan Set to Take Effect July 1," *State Health Notes*, June 1990.

health and inpatient care related to accidents (\$150 maximum payment for outpatient accident services).⁷⁴

Recent evidence suggests that enrollment in these plans has been lower than expected.⁷⁵ It is too early, however, to conclude that these plans are unsuccessful, since they have not been on the market very long.

High-Risk Pools. High-risk pools are entities created by States to support special private plans targeted to persons who are deemed uninsurable. Risk pools have been established in 26 States to provide health insurance to individuals at high risk for large health care expenses and who may also currently be excluded from available health insurance plans because of their high risk. Risk pools have been characterized as having low enrollment due to their very high premiums. Many are experiencing losses due to large claims experiences and are reexamining the scope of coverage for the risk pool. Two examples of State risk pools which are illustrative of this type of initiative are:

Wisconsin Health Insurance Risk Sharing Plan: This plan is administered by the Mutual of Omaha. Premiums are set at 150 percent of average non-group coverage, and the program has a \$1,000 deductible and a \$250,000 lifetime maximum. The program is losing money and is under pressure to raise premiums and limit benefits.⁷⁶

⁷⁴ Intergovernmental Health Policy Project, "Bare Bones" Insurance Plans: Filling the Small Business Gap," *State Health Notes*, May 1991.

⁷⁵ Michael DeCourey Hinds, "Insurers' Drive to Sell 'Bare Bones' Health Policy Falters for Lack of Interest," *The New York Times*, November 10, 1991.

⁷⁶ Bob Griss, *Report on Health Care Coverage for Working-Age Persons with Disabilities: A Key to Reducing Disincentives to Work*, Department of Health and Social Services, Madison, WI: December 1985.

Utah Health Insurance Pool Act: Coverage is provided for uninsurable workers and their dependents. Premiums range from 125 percent to 200 percent of the standard rates for non-group coverage. Premiums are shared by pool enrollees and employers, with employers contributing an amount equal to the cost for an insurable employee.⁷⁷

Demonstration Projects. Demonstration projects have been used by States to test approaches for expanding access to care without committing to a major new State program. The interest in demonstration projects is likely to persist given the lack of a consensus around a single health care reform approach and State fiscal constraints which limit any major new initiatives. The NGA's reference to the 1990s as the "period of experimentation" perhaps signals an expanding role for State demonstration projects in health care reform.

Role of Demonstration Projects. Demonstration projects provide an opportunity to test a number of approaches for health care reform and to learn more about the impact of these approaches. They provide information about the potential impact, problems, and generalizability of each approach. The findings from demonstration projects can provide important lessons and insight into which approach might be best applied to the American health care system.

A number of demonstration projects to expand coverage for the uninsured are being conducted throughout the country. Most of these demonstration projects are targeted toward expanding coverage for small employers. One of the largest efforts was undertaken by the Robert Wood Johnson Foundation (RWJF) through its Health Care for the Working Uninsured Program which supported the development of demonstration projects aimed at expanding the

⁷⁷ Health Insurance Association of America, "Legislation Pending or Passing at Least One House as of May 1990."

availability and affordability of insurance for the working uninsured who are employed primarily in small firms. Demonstration projects in other States have been modeled after the RWJF projects.

Demonstration projects have been used in three ways: (1) to phase-in a specific approach to be implemented statewide; (2) to test variations in plan design to identify combinations of benefits, cost-sharing, and subsidies that are effective in reducing small group market barriers; and (3) to provide start-up funds to develop a product that can eventually be self-sustaining.

Experience of Demonstration Projects. This section describes the lessons learned from the existing demonstration projects, drawing primarily from the experience of the RWJF projects. The RWJF has been active since 1986 in sponsoring private initiatives at the State and local levels to improve access to health care for the working uninsured. A total of 15 grants were awarded. Fourteen of the projects are seeking to develop new health insurance mechanisms for small business, and one project is offering health insurance brokering and information services. The projects generally employ a combination of four strategies to reduce the cost of insurance to small employers including limiting plan benefits, encouraging greater employer cost-sharing, subsidizing the plan premium, and reducing the cost of services through either managed care or provider discounts.

As of June 1991, the nine RWJF projects that began enrolling had a combined enrollment of 21,624 persons. Enrollment by project ranged from 246 for the Central Alabama Coalition for the medically uninsured to 6,932 for the Denver SCOPE project.⁷⁸ Some early lessons of the program are:

⁷⁸ Alpha Center, "Aggressive and Innovative Marketing Techniques Needed to Sell Group Health Insurance to Small Employers," *Health Care for the Uninsured Update*, No. 12, July 1991.

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- price is the chief consideration of both the employer and employee when choosing an insurance plan;
 - the smallest employers have shown the most interest in the demonstration projects; the average size of participating firms ranges from two to five employees;
 - insurers who market to firms with 10 or fewer employees tend to have strict medical underwriting;
 - small employers want the same type of coverage that is available to large employers. Basic benefit plans that severely limit hospitalization are not easily sold to either small employers or their employees; both groups favor plans that offer protection from major physician and hospital expenses; and
 - an aggressive marketing effort must be implemented that both creates an awareness of the need for coverage and generates interest in a specific product. Projects with the largest enrollment are the projects utilizing the most sophisticated marketing techniques.⁷⁹

The early results of the RWJF demonstration projects suggest that while these projects can reduce some of the barriers to health insurance coverage, their impact is limited. The projects found that even with premiums 25-50 percent below market rates, only 20-25 percent of uninsured small groups will purchase coverage voluntarily.⁸⁰

⁷⁹ Alpha Center, "Early Lessons from the Health Care for the Uninsured Program," *Health Care for the Uninsured Program Update*, No. 8, October 1989.

⁸⁰ *Ibid.*

The projects have also shown that continued subsidies are required to expand insurance to the working uninsured. Subsidies for low-income workers appear to be needed given that the projects were only able to achieve modest reductions in premiums compared to market rates. The successful RWJF projects continued to receive State subsidies after their grant monies expired.

Another lesson from the RWJF projects is that fostering private sector support is important to the success of these approaches. While public funds or grant monies may be critical to the development of a sustainable product and give the projects the ability to subsidize expenses for low-income persons, commitment from the insurance industry, local providers, and small businesses for whom the product was designed is critical to the viability of the project.

The experience of the RWJF projects provides important lessons about the effectiveness of targeted market reforms to expanding access to care. In fact, despite their limited scope, the demonstrations have illustrated several of the problems of reforming the employment-based insurance market. They have also defined the components of insurance that affect affordability, availability, and perceived value to small employers. These lessons provide valuable information to those considering large scale reform efforts.

OPTIONS FOR FINANCING LONG-TERM CARE

The financing and delivery of long-term care services pose challenging public policy dilemmas. After briefly reviewing some of the current major problems of long-term care, this paper presents a framework for assessing long-term care reform options. A number of public, private, and combined public/private options are then described. The paper concludes by applying the framework to several of the reform initiatives.

The Problems of Long-Term Care

Proposals designed to reform long-term care financing and delivery must address the five major long-term care problems discussed below.

The Catastrophic Costs of Long-Term Care. Long-term care (LTC), particularly nursing-home care, is very expensive. The elderly have about a 20 percent chance of spending a year or more in a nursing home, at an annual cost of roughly \$30,000 (in 1990 dollars).⁸¹ As a result, many elderly are impoverished by the cost of their long-term care.

The Lack of Risk-Pooling for Long-Term Care. Traditionally, individuals faced with the risks of substantial economic loss choose to purchase insurance. Private insurance markets for long-term care, however, have been slow to develop. As of January 1991, only 1.9 million policies had been sold.⁸² Public long-term care risk-pooling is also extremely limited.

⁸¹Estimates from the Brookings/ICF Long Term Care Financing Model.

⁸²Health Insurance Association of America, *News Release*, May 30, 1991.

Although \$27.7 billion of the \$53.1 billion (52 percent) spent on nursing-home care was provided by public programs, these programs do not provide LTC risk-pooling. Medicare's LTC benefits aid post-acute care patients, while the Medicaid program provides LTC benefits only to the destitute.

Variation and Lack of Access to Long-Term Care Services. The amount and type of long-term care services offered by different States varies widely, especially for home care services. Because many States have extremely limited Medicaid home care programs, there is substantial variation in the home care services offered by Medicaid.⁸³ Access to nursing-home services also varies geographically. In 1989, the number of nursing-home beds per 1,000 age 65 and older population in the U.S. was 52.8; nursing home bed supply ranged from a low of 26.2 per 1,000 elderly in Nevada to a high of 85.3 in Kansas.⁸⁴

Questionable Quality of Some Long-Term Care Services. The quality of care in some nursing-home and home care settings is poor, and there is an unacceptable level of variation in the quality of public programs.⁸⁵

High and Increasing Long-Term Care Expenditures. Over \$53.1 billion was spent on nursing-home care in 1990; another \$6.9 billion was spent for home care services. In the future, these expenditures will likely increase

⁸³In the Omnibus Budget Reconciliation Act (OBRA) of 1981, States were allowed to apply to the Health Care Financing Administration (HCFA), which administers the Medicare program and oversees State Medicaid programs, for three year home and community long-term care waivers (Section 2176 Waivers). For a waiver to be approved, however, the State had to demonstrate that patients would otherwise be institutionalized as Medicaid patients and that the home and community care could not cost more than the foregone nursing-home care.

⁸⁴U.S. Department of Commerce, Bureau of the Census, *State Population and Household Estimates: July 1, 1989, Series P-25, No. 1058, 1990.*

⁸⁵Alice Rivlin and Joshua Wiener, with Raymond Hanley and Denise Spence, *Caring for the Disabled Elderly: Who Will Pay?*, Washington, D.C.: The Brookings Institution, 1988.

rapidly, as services become more expensive and as the size of the elderly population doubles over the next 40 years.

A Framework for Analyzing Long-Term Care Reform Options

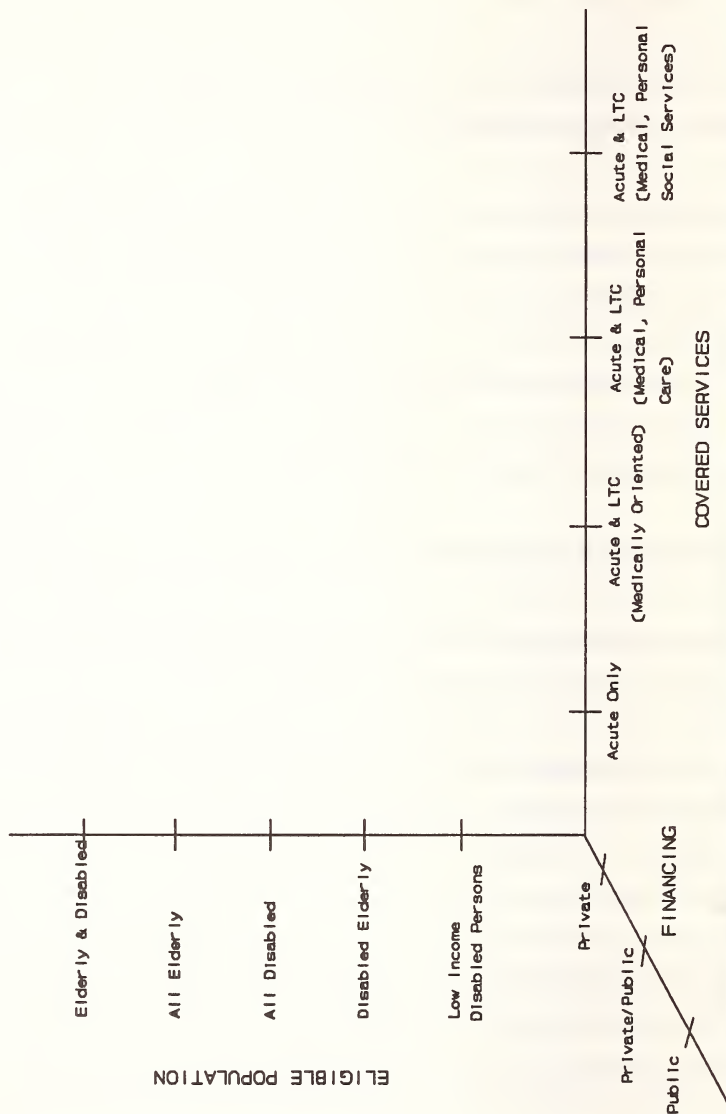
In addition to addressing the five major problems outlined above, long-term care delivery and financing reform options must strike a balance among several competing features:

- the method of financing;
- the type of covered services; and
- the eligible population.

A fourth dimension important to long-term care reform proposals is whether or not any proposal increases the pooling of risk.

The three features of reforms for risk-pooling approaches are shown in figure 1. These dimensions represent the basic choices necessary in designing or redesigning, and evaluating, long-term care reform options. Figure 1 also shows the most important categories within each dimension. Because of the importance of cost, the categories shown in figure 1 are arrayed on each dimension according to their potential cost implications to the Federal Government. It is important to note that this emphasis on cost is but one method to arrange the categories; other methods could be defined (e.g., defining populations with the most "need"), and the categories on each axis of the framework would then be adjusted accordingly.

FIGURE 1
LONG TERM CARE OPTIONS FRAMEWORK
FOR PROPOSAL THAT POOL RISK



Risk-Pooling

A key distinction regarding long-term care reform proposals must be made between individual financing and risk-pooling. One set of options includes methods in which individuals independently accumulate savings to pay for long-term care. In contrast to individual accumulation, risk-pooling allows persons to spread the costs of care among all members of the pool, reducing the burden on any one individual for the costs of care in the event of illness. Insurance is one method of risk-pooling.

Method of Financing

The second dimension of any long-term care reform option is the financing of the services. In figure 1, financing is represented as a continuum which ranges from total individual (private) responsibility for the cost of care to total government (public) responsibility. Options which mix public and private financing responsibility lie between these two extremes. Note that both public and private financing methods can involve individual financing or risk-pooling.

Type of Covered Services

The third dimension of any long-term care reform option is the type of services covered. Third party coverage of long-term care services under the current system is limited. It includes post-acute skilled nursing care in an institution or through a home health agency (generally paid by Medicare and private acute health insurance), State-funded personal care and social services in some states and localities, intermediate and custodial care in an institution, and home care through private long-term care insurance or through Medicaid for eligible persons with low income or high medical costs.

Two broad categories of services could be covered under a reform option: (1) acute care; and (2) long-term care. Acute care is composed of: (1) hospital-based services (e.g., emergency care, inpatient surgery, acute illness); (2) ambulatory services (e.g., physician office visits, outpatient surgery); and (3) ancillary services (e.g., prescription drugs, medical equipment, and supplies). Long-term care services include: (1) medically oriented services (e.g., skilled nursing care, medical procedures, and technology); (2) personal care services (e.g., assistance with activities of daily living [ADLs])—bathing, dressing, toileting, transferring, eating, and continence); and (3) social services (e.g., assistance with instrumental activities of daily living [IADLs])—transportation, shopping, housekeeping, etc.).

Most of the acute care services described above are currently covered for the elderly under Medicare and for the targeted poor under Medicaid either as a mandatory benefit or as an optional benefit through the payment of premiums under Medicare Part B coverage.⁸⁶ On the other hand, Medicare and Medicaid have traditionally paid for primarily medically oriented nursing home and home care services. Other long-term care services, such as personal care and social services, have not been traditionally covered through federally funded programs. In part, this has occurred because these personal care and social services are said to be difficult to monitor and because there is a debate over the degree of State discretion in the financing and delivery of health services.

⁸⁶ Medicare Part B, or supplemental medical insurance, provides non-hospital acute care coverage to its beneficiaries. It is funded by a combination of premiums (\$29.90 per month in 1990, or 25 percent of the total), and general revenues (the other 75 percent). Almost all Medicare-covered elderly elect Part B coverage; States must pay the premiums, copayments, and deductibles of Medicare Part B for their Medicaid-covered elderly (e.g., qualified medical beneficiaries).

Eligible Population

The fourth dimension of the framework for analysis involves the population eligible to receive benefits. Under the current system, elderly persons age 65 and over may receive skilled nursing home care and home care under Medicare, provided that skilled care is medically necessary.⁸⁷ As previously mentioned, eligibility for Medicaid benefits is means-tested. Eligibility requirements for other State and locally funded long-term care services vary and, for budgetary reasons, are usually quite stringent.

The categories included in the framework are: (1) low income disabled persons only; (2) the disabled elderly; (3) all disabled; (4) all elderly; and (5) all elderly and disabled. The categories are arrayed in terms of increasing numbers of persons covered. The categories are not exhaustive and can be further refined. For example, disability could be defined as persons with two or more ADL limitations and may or may not include persons with cognitive impairment.

The size of these population groups varies significantly. As shown in exhibit 1, in considering the potential size of the population eligible for home care services, the number of elderly and non-elderly disabled persons ranges from 2.5 to 3.5 million, depending on how disability is defined (e.g., having two or more ADL limitations versus having three or more limitations). If the eligibility criteria are restricted to include only persons with low income (defined as income below 100 percent of the poverty line), and two or more ADL limitations, the number of persons falls to approximately 1.2 million.

⁸⁷Persons under 65 who have been disabled for two or more years are also eligible for Medicare SNF and home care benefits.

EXHIBIT 1

EXAMPLE OF THE NUMBER OF PERSONS POTENTIALLY ELIGIBLE FOR HOME CARE SERVICES UNDER LONG TERM CARE REFORM OPTIONS, 1990 (In millions)

	Two or More ADLs	Three or More ADLs	Low Income Disabled (with Two or More ADLs)
Non-Elderly (Age 18-64)	1.0	0.7	0.3
Elderly	2.5	1.8	0.9
Total	3.5	2.5	1.2

Source: Lewin/ICF estimates.

* Includes cognitively impaired persons.

Review of Options

Several current proposals for financing long-term care are described below. The key distinguishing factor among these options is the method of financing. (See exhibit 2.) Each of the proposals described could be designed to include any range of covered services and almost any eligible population. Therefore, the proposals are grouped according to whether each is: (1) primarily publicly financed; (2) primarily privately financed; or (3) a combination of publicly and privately financed.

EXHIBIT 2

OPTIONS FOR LONG TERM CARE REFORM

Publicly Financed	Privately Financed	Public/Private Financing
Medicaid Reform	Individual Medical Accounts (IMAs)	Medicaid Spenddown Insurance
Comprehensive Social Insurance	Incentives for LTC Insurance Purchase	Voluntary Medicare Insurance
Front-End Nursing Home Coverage	Accelerated Death Benefits	Combined Medicare Acute/LTC Coverage
Back-End Nursing Home Coverage	Use of Pension Funds	
Expanded Home Care		

Public Options

Public options fall into two categories: those that involve risk-pooling and those that do not. The major approach that does not involve risk-pooling would reform Medicaid long-term care programs. Public risk-pooling approaches are generally referred to as social insurance. Medicaid reform builds on the current Medicaid program, while social insurance approaches do not use means-tested eligibility criteria for the reimbursement of services. Social insurance approaches currently proposed include: (1) comprehensive social insurance; (2) a front-end benefit for nursing-home care; (3) a back-end benefit for nursing-home care; and (4) expanded home care coverage.

Medicaid Reform. Proposals to reform Medicaid eligibility for long-term care services would generally increase the financial resources participants

would be allowed to retain.⁸⁸ Note that this approach would not increase risk-pooling, because the Medicaid program does not pool risks for long-term care service use. Medicaid financing is received only when a person is poor and in need of care. Current eligibility criteria for Medicaid financing vary depending upon a recipient's State of residence. Eligibility criteria also differ for nursing-home care and for home care services.

For Medicaid nursing-home care eligibility, most States require single persons to have non-housing assets of \$2,000 or less. Married persons also must have \$2,000 or less in non-housing assets, but are allowed to allocate a specified portion of non-housing assets to a spouse remaining in the community (the greater of up to \$12,000 or one-half of combined assets up to \$60,000). If a resident's asset level is less than these criteria and nursing-home expenses exceed their income, the patient generally will qualify for Medicaid.⁸⁹ While receiving Medicaid, a patient must contribute nearly all his or her income to the cost of care. Medicaid residents are permitted to keep approximately \$35 a month for personal needs (e.g., toiletries, magazines, clothing).

In 17 States, a nursing home patient's income, as well as financial assets, must not exceed specified levels to qualify for Medicaid, regardless of the nursing-home costs. For example, if the same single elderly person described above was in a State that required monthly income not to exceed \$1,020 to qualify for Medicaid in a nursing home, the person would not receive Medicaid, even though the cost of the nursing home is greater than his or her monthly income.

⁸⁸Senator Packwood recently introduced a bill (S. 1668, 102nd Congress) that would institute limited Medicaid reform provisions.

⁸⁹Married persons are permitted to allocate 150 percent of the poverty level to their spouse remaining in the community.

Most elderly persons in the community who are covered by Medicaid qualify for Medicaid as a result of receiving Supplemental Security Income (SSI) payments. Based on the Federal portion of SSI, the maximum monthly income permitted for Medicaid eligibility for persons living in the community in 1991 are monthly income of \$550 for an individual and \$740 for a couple. States vary in the income eligibility criteria for Medicaid home care services, because some States have higher SSI eligibility thresholds.

Reform proposals for the Medicaid program include provisions to:

- increase the nursing-home personal needs allowance for Medicaid nursing home patients;
- raise the income and asset thresholds for recipients and/or their spouses to qualify for Medicaid nursing home and home care benefits;
- permit housing allowances for the upkeep of a patient's residence to maintain its value and inhabitability for when and if the patient returns home;
- abolish the budget neutrality requirements States must meet in applying for permission to initiate home and community-based waiver programs under Medicaid. These programs permit States to offer a more comprehensive set of services (e.g., personal care and home health aid services) to chronically disabled persons in the community; and
- require all States to provide medically needy coverage for nursing-home care (persons would be eligible for Medicaid if their income less their medical expenses is less than the level to qualify for Medicaid and if they meet the Medicaid assets test).

Advocates of Medicaid reform proposals argue that these incremental, targeted approaches are the best use of limited funds. Detractors cite the inadequate quality of care, restricted access, and the fragmented, variable system of the current Medicaid program as arguments against using the system as a vehicle to address long-term care problems.

Comprehensive Social Insurance. Proposals for a comprehensive social insurance program to finance long-term care services usually rely on general revenues or some form of broad-based taxation earmarked to cover the cost of benefits. In the broadest sense, a social insurance proposal would cover a wide range of long-term care services for as long as care is needed. The most comprehensive proposals would cover unlimited nursing-home and home care services with limited cost sharing requirements.

These proposals are generally designed to make the current structure for financing and eligibility for public programs less haphazard and more coordinated. Such proposals use the rationale that long-term care should receive insurance coverage similar to that permitted for acute care services under Medicare. Comprehensive social insurance proposals would require large amounts of new revenue to be generated.

Front-End Nursing Home Coverage. Proposals to cover the front-end of a nursing home stay are based upon the rationale that persons who have shorter stays are more likely to return to the community after their stay.⁹⁰ Approximately one-quarter of all elderly nursing home entrants are

⁹⁰Plans which cover the first six months of a nursing home stay have been proposed by Robert Ball and T. Bethell, *Because We're All in This Together*, Washington D.C., Families U.S.A. Foundation, 1989. The Pepper Commission proposed a plan covering the first three months of a nursing home stay (Bipartisan Commission on Comprehensive Health Care, *Access to Health Care and Long-Term Care for All Americans*, Washington D.C., U.S. Government Printing Office, 1990).

discharged to the community.⁹¹ Proponents of front-end coverage argue that these persons returning to the community need to preserve their assets to maintain the standard of living they built for themselves before they were admitted to the nursing home. Front-end nursing home coverage proposals would benefit all nursing home entrants, but cover a limited number of the total nursing home days. Detractors of such an approach point out that a three-month nursing home stay costs an average of \$7,500, an amount that many nursing home residents could reasonably be expected to have saved to contribute toward the cost of their nursing home stay.

Back-End Nursing Home Coverage. Proposals to cover the back-end of nursing home care are based on the rationale that persons with long nursing home stays are more likely to experience catastrophic costs than short-stay nursing home patients. Proposals to cover the back-end of a stay would generally start paying benefits after one to two years of nursing home care.⁹² A high percentage of nursing home days are attributable to residents who stay longer than a year. The majority of these days are currently financed by Medicaid.

In providing coverage for the high-risk portion of nursing home stays and thus limiting insurer liabilities, such a program might increase the affordability and attractiveness of long-term care insurance for more Americans. But, unless other incentives (i.e., tax credits or premium subsidies) are employed, even in limiting insurance policies to two years, many would not be able to afford coverage. The current elderly, particularly those most likely in need of nursing home care, would not be able to purchase long-term care insurance because of medical underwriting and

⁹¹Estimates from the Brookings Institution and Lewin/ICF based on data from the 1985 National Nursing Home Survey Discharge File.

⁹²A two-year plan is proposed in a bill sponsored by Senators Mitchell, Chaffee, and Graham, "Long-Term Care Assistance Act of 1988," Senate Bill 2305, 100th Congress, 2nd Session, 1988.

because most insurance companies do not offer policies to persons over age 80.⁹³ Also, some argue that the primary benefit of these proposals is to preserve assets for the small proportion of persons with long nursing home stays, most of whom die in the nursing home.

Expanded Home Care. Proposals to expand public coverage of home care services have been made in response to the expressed desires of the elderly to remain in their homes.⁹⁴ Expanded home care services would also reduce the institutional bias of current public long-term care financing. Expanded home care coverage has been proposed for a number of targeted groups, generally the severely disabled and low-income persons. Most proposals include ADL-related personal care services and some even include social services.

One potential challenge in expanding home care coverage is in maintaining cost control and the quality of services provided. With 90 percent of disabled elderly persons receiving assistance from family and friends,⁹⁵ any new home care program is expected to increase demand for paid services considerably.⁹⁶ Managing this new demand and coordinating efficient delivery of quality services may be difficult.

The public costs of these different proposals can vary substantially. For example, back-end coverage of nursing home care is typically much more expensive than front-end coverage, even though front-end coverage provides benefits to more people. The reason for this cost difference is simple; even though most nursing home stays are short (and front-end coverage would

⁹³Federal or State incentives could be introduced to expand access to policies for these groups.

⁹⁴Bipartisan Commission on Comprehensive Health Care, *Access to Health Care and Long-Term Care for All Americans*, 1990.

⁹⁵Rivlin and Wiener, *Caring for the Disabled Elderly: Who Will Pay?*

⁹⁶Teresa Fama and David Kennell, "Should We Worry About Induced Demand for Long Term Care Services?" *Generations*, Vol. XIV, No. 2, Spring 1990.

provide benefits to all nursing home patients), most nursing home days occur in very long (e.g., 1 or 2 years or more) stays.⁹⁷ Also, in considering expanded home care proposals, the level of disability required to receive services greatly influences the expected cost increases.

Private Options

Four long-term care reform options have been proposed which are primarily privately financed: (1) Individual Medical Accounts (IMAs); (2) incentives for the purchase and regulation of long-term care insurance; (3) accelerated death benefits; and 4) the use of pensions to finance long-term care.

IMAs. Individual Medical Account proposals would allow tax-deferred contributions and interest accumulation for accounts designated for long-term care expenses. Most of these proposals have been designed to allow for individual asset accumulation rather than risk-pooling, but IMAs could be used to fund the purchase of long-term care insurance.⁹⁸

For this approach to be effective, individuals must begin preparing for long-term care expenses at a point during their working life when they may not be aware of the potential risks of catastrophic long-term care expenses and/or may have compelling competing demands for their resources (e.g., children). As a consequence, limited numbers of people may participate and those who do participate may not accumulate adequate funds to finance their long-term care expenses. The effectiveness of this approach can be increased if the individual accumulations are used to purchase long-term care insurance, particularly if policies are purchased at younger ages.

⁹⁷Estimates from the Brookings/ICF Long-Term Care Financing Model.

⁹⁸Donald W. Moran and Janet M. Weingart, "Long-Term Financing Through Federal Tax Incentives," *Health Care Financing Review: Annual Supplement*, 1988, pp. 117-121.

Incentives for LTC Insurance. The Federal Government could allow private firms to offer LTC insurance as a tax-exempt fringe benefit (similar to the current tax status of employer-provided health insurance to employees).⁹⁹ Moran and Weingart (1988) detail other uses of the tax code, such as tax deductions and credits, which could encourage the purchase of LTC insurance.¹⁰⁰ Encouraging the purchase of long-term care insurance would increase the number of persons participating in risk pools for long-term care.

Some proposals target the incentives to persons less likely to purchase LTC insurance, especially persons with low incomes. Even with incentives for the purchase of long-term care insurance, it has been estimated that a substantial portion of the elderly would still be unable to afford a policy.¹⁰¹

Accelerated Death Benefits. Accelerated death benefits would allow persons in nursing homes to use the death benefits of their life insurance policies to pay for nursing home care.¹⁰² The benefit is also designed to ease the financial burdens of terminally-ill persons and permit a degree of financial freedom that might not otherwise be possible during a policyholder's remaining life. The discussion here focuses on the viability of accelerated death benefits as a method of financing long-term care services.

Some insurance companies now offer accelerated death benefits. The accelerated death benefits would have the same tax-exempt status as life

⁹⁹Currently, the tax-exempt status of long term care insurance premiums obtained through cafeteria-type employer plans has not been explicitly addressed by the Internal Revenue Service or through legislation.

¹⁰⁰*Ibid.*

¹⁰¹Rivlin and Wiener, *Caring for the Disabled Elderly: Who Will Pay?*

¹⁰²Aileen Kantor, "Living Benefit Options: Another Way to Finance Long Term Care," *Business and Health*, Feb. 1991, pp. 52-53.

insurance benefits paid to the policyholder's beneficiaries. Accelerated death benefits do not increase the pooling of risks.

Such a proposal is not likely to be a viable option for financing long-term care use for many of the current elderly. Of the little over one-half of the elderly with a life insurance policy,¹⁰³ approximately 80 percent have face values less than \$10,000.¹⁰⁴ The average face value of life insurance owned by elderly persons is approximately \$7,500, an amount sufficient to cover only three months in a nursing home on average. The effectiveness of this vehicle as a means for financing long-term care in the future is also questionable because it depends upon older persons maintaining high life insurance values.

Use of Pension Funds. Proposals to allow the use of pension funds to finance long-term care include both pre- and post-retirement election options. Persons in pre-retirement options electing to participate would accept reduced pension benefits at retirement in exchange for the purchase of long-term care insurance through their vested pension benefits. The advantage of pre-retirement options is that workers can use funds to purchase long-term care insurance when they are young and the premiums are low. For such an option to be an effective method for preventing individual liability for catastrophic LTC costs, workers must be aware of their potential long-term care risks and confident that long-term care insurance products are solid investments.

¹⁰³Life Insurance Marketing and Research Association, *Technical Supplement to Shifting Patterns in U.S. Life Insurance Ownership*, 1984.

¹⁰⁴Estimate based on Lewin/ICF tabulations of data from the 1984 Survey of Income and Program Participation (SIPP). SIPP indicates 63 percent of the elderly have life insurance. Most accelerated death benefit proposals would pay based on the equity held in a permanent life insurance policy. The estimate from SIPP likely overestimates life insurance values held by the elderly because it reports face values of life insurance policies not equity held.

In contrast to increasing risk-pooling on a pre-retirement basis, another option would increase post-retirement benefits. One variant of this proposal would reduce pension benefits in the early years of retirement so that benefits may be increased in the later years or be paid in a lump sum when long-term care expenses are more likely to occur. These proposals take advantage of pooling risks only when they are structured to pay higher benefits if a recipient becomes disabled or uses long-term care services.

Public/Private Options

The following long-term care proposals would be jointly financed by public and private funds: (1) Medicaid spenddown insurance; (2) voluntary public long-term care insurance under Medicare; and (3) the coordination/combination of both acute and long-term care services through Medicare.

Medicaid Spenddown Insurance. Medicaid spenddown insurance seeks to increase the purchase of long-term care insurance and reduce the number of people who deplete their assets in nursing homes. The proposal encourages risk-pooling by encouraging the purchase of long-term care insurance. Under this proposal persons who purchase insurance would be able to qualify for Medicaid protection without spending all their assets. Currently, most State Medicaid programs require that single persons spend all but \$2,000 of their assets (not counting their home equity and a few other items) to qualify for Medicaid.

Under a spenddown insurance program, individuals who purchased and used long-term care insurance would be allowed to keep an increased level of assets and still qualify for Medicaid. Specifically, when an insurance purchaser's financial assets equal the amount of insurance benefits paid plus \$2,000, the person would be eligible for Medicaid assistance. Therefore, each dollar that long-term care insurance pays out is subtracted from assets

considered by Medicaid in determining eligibility. The State of Connecticut recently received approval for amendments to their State Medicaid plan from HCFA to implement such a program.

In order for Medicaid spenddown insurance to be an effective method for addressing long-term care problems, it would likely need to be coupled with other reforms, because not many elderly could afford to purchase the insurance. Because those able to purchase Medicaid spenddown insurance are not likely to have spent down to Medicaid without the insurance, this proposal could change the nature of the Medicaid program. Medicaid spenddown insurance also has the potential to increase Medicaid costs depending upon who purchases insurance and the level of induced demand caused by the program.

Voluntary Medicare LTC Insurance. Some proposals to cover long-term care insurance would allow Medicare beneficiaries the option to purchase government-sponsored coverage, similar to the Part B coverage option. The benefits under such a program, any combination of nursing home and home care benefits, could be financed either through premiums or increased deductibles for Part A or B services.¹⁰⁵ By covering part of the costs of long-term care, individuals pool risks of some long-term care services and may be encouraged to purchase private insurance for other required long-term care services.

Voluntary Medicare LTC insurance has the advantage of reaching a broader base of persons relative to private pension options because nearly all workers are eligible for Social Security and Medicare, while a smaller percentage

¹⁰⁵So-called "Medicare Part C" proposals have been proposed to be financed by income tax surcharges and higher Medicare premiums for elderly families above 149 percent of the poverty line (R. Danielle Federa and Nancy L. Oettinger, "Beyond Catastrophic Insurance: The Future of Public Funding for Long-Term Care," *Topics in Health Care Financing*, vol. 17 (1991), pp. 22-31).

have vested private pensions. Depending on the structure, such a program might encourage adverse selection. Requiring beneficiaries to elect coverage at age 65 would reduce the potential for adverse selection.

Combined Medicare Acute/LTC Coverage. This approach would coordinate and combine both acute care services and long-term care services under one system of financing and be a voluntary beneficiary option under Medicare. The proposal to combine acute care and long-term care coverage is designed to address the problems of persons with a lack of third-party coverage for long-term care services and the fragmented and uncoordinated nature of the delivery system for acute and long-term care services.

For persons electing this option, a private insurance plan would cover initial medical expenses up to a specified threshold. Depending upon the structure, individuals could pay premiums, copayments, and/or deductibles to finance this coverage. A public plan would then cover catastrophic medical expenses for beneficiaries who exceed the private financing threshold.

Specifying a limit on the level of health care expenses for which persons would be liable would reduce the uncertainty and accompanying anxiety associated with costly illnesses. In paying for acute and long-term care under one system, the advantages of coordinating the level of care and appropriate setting will benefit patients and potentially control cost increases.

The voluntary nature of the plan may encourage adverse selection, although limiting eligibility periods may reduce these risks. Another concern is the affordability of the private coverage premiums for lower income individuals. However, the premiums for these persons could be subsidized by the public plan to encourage their participation.

Use of the Framework

In evaluating and designing options for long-term care reform, the four dimensions of the framework described earlier—risk-pooling, financing, covered services, and the eligible population—provide a structured method for arraying proposals or choosing among the options in developing a proposal.

For example, in developing a proposal to expand coverage of home care services, a policy maker would have a number of decisions to make. Such a proposal is likely to be a public financing option, but it also could be designed with a public/private financing mechanism if the programs were sponsored by the government but funded by premiums collected from participants. The services covered under expanded home care could be limited to medically based services, but would no longer require the recipient to be a post-acute care patient. A more expensive program might offer social services as well, including chore services and meals-on-wheels delivery. The eligible population could be narrowly targeted to only severely disabled, low income elderly persons, or broadened to include disabled persons regardless of age.

In examining a proposal such as back-end coverage for nursing home care, components of the proposal can be easily arrayed within the framework for analysis. By offering public coverage for nursing home stays lasting longer than two years, beneficiaries would be encouraged to purchase private long-term care insurance for the initial portion of a stay. Some proposals limit the eligible population to all elderly in nursing homes and elderly persons with two or more ADLs in the community. The types of covered services are generally more broad than current Medicare nursing home coverage and are comparable to current Medicaid nursing home coverage. Some of these

proposals expand coverage for community-based care to include personal care services. Copayment requirements for the public nursing home and home care benefits are also usually included.

Similarly, additional long-term care reform proposals should be examined within the framework as discussions of the proposals presented in this paper and other proposals continue.

Part One: Access

Approaches for Financing Expansions in Access to Care



APPROACHES FOR FINANCING EXPANSIONS IN ACCESS TO CARE

Recently, a great deal of attention has been paid to various proposals which seek to improve access to health care. Many of these proposals would involve increased Federal spending on health care. Less attention has been paid to how these new programs (or extensions to existing programs) will be financed. This paper addresses eight different sources of financing:

- payroll taxes;
- personal income taxes;
- taxing some employer-provided health insurance benefits as income;
- a value-added tax (VAT);
- "sin" taxes, such as excise taxes on gasoline, alcohol, and tobacco;
- national lotteries;
- "user" taxes, so that those covered in a new program pay a disproportionate share of the program's costs; and
- estate and gift taxes.

These eight alternatives have been considered in financing health care reform because they can be easily integrated into the existing tax system and because they raise substantial amounts of revenue.

Current political realities will force proponents of Federal health care reform to pay close attention to various financing options. The large chronic budget deficits have caused the national debt to increase dramatically.¹⁰⁶ Hoping to contain any further growth in the Federal debt, two recent laws have been passed which attempt to impose some fiscal discipline: (1) the Gramm-Rudman-Hollings Deficit Reduction Act of 1985 required that Federal spending meet a set of deficit targets which would balance the budget by fiscal year (FY) 1993; and (2) as part of the budget agreement in the Omnibus Budget Reconciliation Act (OBRA) of 1990, new budget rules were passed: (a) spending was divided into several large categories (e.g., defense, social programs, foreign aid, etc.); (b) any new spending program must be funded by cutting other appropriations within its budget category; and (c) savings from spending cuts in one budget category cannot be used to raise spending in another, but instead can only be used to reduce the deficit.¹⁰⁷ Given the difficulties in cutting spending for social programs, it appears likely that new health care spending will be funded by new tax revenues.

With two exceptions, the revenue sources considered here are not part of "general revenues."¹⁰⁸ This choice is deliberate. Financing additional access to health care through raising general revenues would involve modifying the agreements reached in the Tax Reform Act of 1986, which is at best a very difficult political task. A more subtle point than the sanctity of past political agreements is that it is often easier to "sell" a new spending

¹⁰⁶ Office of Management and Budget, *Budget of the United States Government: Fiscal Year 1992*, Washington D.C., U.S. Government Printing Office, 1991.

¹⁰⁷ For example, reductions in military spending (e.g., the "peace dividend") cannot be used to fund new social programs.

¹⁰⁸ Some of these alternatives include: (1) altering corporate taxation—raising the alternative minimum tax or corporate marginal tax rates; or (2) replacing the current system of payroll taxes, personal and corporate income taxes, excise and other taxes with an entirely new tax system—perhaps a unified income tax, or a pure consumption tax.

program that is funded by special tax sources. An explicit tie is forged between costs (the tax) and benefits (the new programs). While opposition to general tax increases among the general public is well-known, forging a coalition which favors "dedicated" tax increases designed to fund individual programs is often possible.

This paper begins with a discussion of the projected costs of some of the current health care initiatives. Understanding the size of these costs provides some context for considering the various revenue proposals. Next, a framework for analyzing the different financing approaches is presented, which considers: (1) how much net revenue the alternative could raise; (2) how each alternative affects economic and personal incentives; and (3) issues of fairness and equity—whether certain groups, particularly the poor, will contribute a disproportionate share of these new revenues. The paper concludes by analyzing each of the eight alternatives within the framework.

The Projected Costs of Various Access Proposals

Any new large government program or substantial expansion of an existing government program would involve large amounts of new government spending. The Federal cost of various access proposals may vary widely, depending on: (1) the particular role of the Federal Government envisioned by each proposal; (2) the size of the eligible population; and (3) the range of services provided by the proposal. To convey some idea of the size of these costs, some proposals anticipate that Federal spending would have to rise \$9 to \$50 billion per year.¹⁰⁹

¹⁰⁹ See U.S. Bipartisan Commission on Comprehensive Health Care Reform (the Pepper Commission), *A Call for Action: Final Report*, Washington, D.C., U.S. Government Printing Office, September 1990; Congressional Budget Office, *Selected Options for Expanding Health Insurance Coverage*, Washington,

Framework of Analysis

When considering different revenue alternatives, policy makers should consider three major issues:

- how much net revenue is raised;
- how are economic and personal incentives affected; and
- how fair and equitable is the alternative?

How Much Net Revenue Is Raised?

Because many of the plans which increase access to health care are costly, the amount of net revenues raised by the various financing alternatives is important.¹¹⁰ The net revenue of a given alternative is equal to the gross revenues raised by the alternative minus the costs of raising these revenues. This accounting identity is not as simple as it appears. Predicting either the gross revenues or the costs of raising those revenues is difficult.

For example, consider a proposal which increases the current excise tax on gasoline. A naive calculation of the amount of gross revenues of this tax change is the product of current gasoline consumption and the increase in the

D.C., U.S. Government Printing Office, July 1991; and Danielle R. Federa and Nancy L. Oettinger, "Beyond Catastrophic Insurance: The Future Funding for Long-Term Care," *Topics in Health Care Financing*, Summer 1991, pp. 22-31.

¹¹⁰ When considering how much revenue can be raised by a given financing option, it is important to remember that the costs of any particular health care proposal will continue indefinitely. For this reason, it is not sufficient to consider whether a particular financing option provides adequate funding over the short term; the long-term expenses of any health care access initiative must also be considered. This is especially true since traditionally expenditures on public health care proposals have risen so rapidly, at a pace that is much swifter than the growth in revenues.

tax. This tax increase, however, raises the price of gasoline, which may lower consumption (e.g., people drive less, start buying more fuel-efficient cars, or start considering alternatives to gasoline). Perhaps even harder to determine are the costs of raising revenue for each proposal. Collecting the revenue could impose substantial administrative costs.¹¹¹ Other sources of revenue could also decline; for instance, imposing a value-added tax would probably increase the price level, which in turn lowers real wages and personal income tax receipts (because personal income tax rates are indexed for inflation). Because many of these financing options will raise the price level, expenditures on public entitlement programs with indexed benefits (e.g., Social Security) will increase. This is another cost of many of these proposals. Finally, State and local governments might have their tax receipts affected by these proposals. For example, increasing Federal excise taxes on alcohol and tobacco would raise their prices and lower the demand for these products, which could lower state excise tax receipts.¹¹²

How Are Economic and Personal Incentives Affected?

In a perfect world, an optimal system of taxation would achieve the following goals: (1) the tax would be "fair;" (2) the costs of collecting the tax would be minimized; and (3) the economic distortions and efficiency losses imposed by the tax also would be minimized. This section discusses the third of these goals.

Whether these financing options are called "revenue enhancements" or tax increases, each will affect the production and consumption decisions of society. This affects the allocation of resources because the relative prices of

¹¹¹ In addition to administrative costs, there might also be compliance costs—for example, value-added taxes might impose substantial paperwork costs on firms.

¹¹² Congressional Budget Office, *Federal Taxation of Tobacco, Alcoholic Beverages, and Motor Fuels*, Washington DC, U.S. Government Printing Office, 1990.

goods and services will change, causing producers to use a different mix of inputs and consumers to demand a different mix of output. For example, a gasoline tax will drive up the cost of gasoline; producers will increase their use of other products (such as coal or other energy sources) as these products now become cheaper than gasoline, and consumers might start driving less or buying more fuel-efficient cars. However, producers could have used alternative energy sources and consumers could have bought more fuel efficient cars before higher gasoline taxes were imposed, but decided not to. This implies that the post-tax gasoline conservation decisions are no more, and probably less, efficient than the old pre-tax increase choice of consuming more gasoline.¹¹³

If economic efficiency were the only social goal, then choosing taxes which minimize deadweight losses would be the most important goal of tax policy. The realities of public policy rule out choosing purely "optimal taxes:" (1) many "optimal" taxes are impractical or unpopular; and (2) public policy may want to reduce (or promote) the consumption and production of some products through tax policy. On the first point, the only tax which does not distort economic decisions is a head or poll tax;¹¹⁴ this tax would be levied at the same rate on all people during their lifetimes. It is unclear if this tax could ever raise sufficient revenues for all government spending, and it would probably be overwhelmingly unpopular.

¹¹³ Economists call this concept "revealed preference." Before the gasoline tax was imposed, consumers decided to drive less fuel-efficient cars; less fuel-efficient cars were "revealed to be preferred" to the available alternative (e.g., energy conservation). From the viewpoint of economic efficiency, choices that are revealed to be preferred are more efficient than any other feasible but foregone alternatives. The gasoline tax encourages consumers to make the less economically efficient decision (e.g., energy conservation).

¹¹⁴ There is the possibility that a head or poll tax might affect fertility and population growth, particularly if parents are required to pay the tax for their children.

Returning to the second point, the production and consumption of certain goods may not be optimal in a world without taxes. The production and consumption of certain goods can impose costs on third parties (e.g., "externalities") which cannot be recovered. True externalities have two causes: (1) some resources in the economy are not owned; and (2) even if the resource is owned, enforcing that property right is too costly. One example of the first cause is the over-fishing of the oceans. Because no one owns the fish in the ocean, fishermen have an incentive to continue to fish until no fish are left (or fishing for the few survivors becomes too expensive). If someone owned the fish, that person or organization would charge fishermen a price for the fish, which would slow down the rate of fishing.¹¹⁵ At times, however, enforcing the property right is too expensive. For example, passive smoke from cigarettes is annoying, and may be actively harmful, to many non-smokers. Even if non-smokers "owned" the right to breath smoke-free air, the costs of agreeing on a fair price of the harm that each smoker causes each non-smoker, and then collecting that price and distributing the proceeds, are clearly so high as to rule out such a transaction. In that case, reducing the amount of production or consumption of these goods by imposing a tax may benefit society as a whole.¹¹⁶

¹¹⁵ Identifying that the lack of defined, enforceable property rights is the cause of many externalities is one contribution of the current Nobel Prize winner in economics, Ronald H. Coase. The celebrated Coase's Theorem goes on to state that an efficient allocation of the resource depends only on establishing a property right and is independent of who owns the property right.

¹¹⁶ In addition, sometimes the person whose property right is being violated is unaware of the violation, or cannot accurately determine the costs of having that property right violated. For example, if toxic waste was dumped into a person's backyard in the middle of the night, that person and his family could remain unaware of that action until a member of the family became ill.

How Fair and Equitable Is the Alternative?

The United States currently has an amazingly complex system of taxation. Taxes are imposed and collected at the national, State, and local levels, and include progressive and flat-rate income taxes,¹¹⁷ corporate income taxes and fees, excise taxes, customs taxes and duties, payroll taxes, user fees, property taxes, etc. There is also a bewildering array of special exemptions, tax credits, tax deductions, and similar complexities. Discussing the "fairness" and "equity" of any particular new tax or source of revenue is clearly a daunting task.

However, most analysts divide issues of equity and fairness into two dimensions: (1) horizontal equity; and (2) vertical equity. A tax is horizontally equitable if it taxes all goods (or services or source of income) at the same rate. Horizontal equity is a largely relative concept, because no tax typically taxes all activities. For example, many non-market activities are not taxed (e.g., leisure), while some taxes target only consumption or income. Testing a particular tax's horizontal equity, then, involves defining what that tax should tax.

To make this point clearer, consider income taxes. An income tax which is horizontally equitable would tax all sources of income at the same rate. Income taxes in the United States (and the rest of the world, for that matter), clearly fail the horizontal equity test. For example, if Mr. A owns a house and rents the house to Mr. B, Mr. A must pay income taxes on the income (Mr. B's rent minus Mr. A's expenses of owning the house) his house produces. However, if Mr. A lives in the house, Mr. A pays no income taxes

¹¹⁷ A progressive tax taxes individuals with higher incomes or assets at higher rates; for example, marginal income tax rates at the national level rise as taxable income rises. In contrast, a regressive tax places higher relative burdens on the poor.

on the income that house still produces (e.g., the value of the shelter it provides).

Vertical equity is concerned with the progressive or regressive nature of the tax; a tax passes the vertical equity test if those individuals of higher economic status (loosely defined by their income and wealth) pay a higher proportion of the tax.¹¹⁸ Different revenue sources often pass one, but not both, tests of equity. For example, a head tax is horizontally equitable (everyone is taxed at the same rate), but not vertically equitable (head taxes are a higher proportion of the economic resources of the poor than of the rich). An opposite case is a sales tax which exempts "necessities" (e.g., food and clothing), to reduce the tax burden on the poor. These exemptions may pass the vertical equity test, but they are not horizontally equitable—different goods are taxed at different rates.

Financing Options

This section of the paper builds upon the previous section's analytic framework by using that framework to evaluate a number of specific financing options: (1) payroll taxes; (2) raising personal income taxes; (3) taxing some employer-provided health insurance benefits as income; (4) value-added taxes (VATs); (5) "sin" taxes; (6) national lotteries; (7) user taxes; and (8) estate and gift taxes. Each subsection begins with a brief definition of the financing alternative in question. The potential revenue that could be raised by each option is considered next. In some sense, each

¹¹⁸ In some sense, the horizontal equity test is a "positive" test; a tax which fails the horizontal equity test imposes economic costs on the society by distorting the allocation of resources. Vertical equity, on the other hand, is largely a "normative" concept. Having the poor pay a disproportionate share of their economic resources strikes most people as unfair, regardless of whether a vertically inequitable tax improves or distorts resource allocation decisions.

option's revenue potential is a measure of that option's "benefits;" the "costs" side of this quasi-cost/benefit analysis are the economic distortions imposed by the tax, which are described in the third part of each subsection. Finally, each subsection closes with a normative assessment of each financing option, in an attempt to address the elusive issues of "fairness" and "equity."

Payroll Taxes

What Are Payroll Taxes? Payroll taxes are levied on personal earnings from employment. Traditionally in the United States, payroll taxes have been assessed as a flat rate of all earnings subject to the tax up to some cap level; no additional payroll taxes are paid above this cap. For example, in 1991, the payroll tax rate for the Old Age Survivors Insurance (OASI) fund was assessed at 12.4 percent of covered earnings up to a cap of \$53,400.¹¹⁹ Payroll tax revenues are explicitly dedicated for the funding of several large government entitlement programs (in particular, the Social Security and Medicare Part A programs).

How Much Revenue Can Payroll Taxes Raise? Currently, payroll taxes raise enormous revenues. For example, the OASI tax raised \$175.3 billion in 1985, \$261.5 billion in 1990, and is projected to raise \$359.5 billion in 1995.¹²⁰ These revenues are large for two reasons: (1) the amount of earnings subject to these taxes is large—in 1989, almost \$2.3 trillion¹²¹ were subject to the tax; and (2) the tax rate is substantial—the total payroll tax rate is 12.4 percent and will remain at that level indefinitely under current law. Assuming covered earnings are not affected by tax increases, raising

¹¹⁹ Committee on Ways and Means, U.S. House of Representatives, *Overview of Entitlement Programs*, Washington D.C., U.S. Government Printing Office, May 7, 1991. ("The Green Book.")

¹²⁰ *Ibid.*

¹²¹ Only earnings currently subject to payroll taxes are considered in the section. The third financing option considered by this paper taxes some employer-provided health insurance benefits, which would increase payroll tax receipts.

payroll taxes by one percent on current covered earnings would raise over \$20 billion per year. Since total covered earnings subject to the tax are expected to rise in the future, any new revenues raised by increasing payroll taxes will continue to increase. Because the Social Security Administration currently collects payroll taxes, raising additional revenues from this source probably would not involve any substantial new administrative costs.

How Do Payroll Taxes Affect Economic Incentives? Payroll taxes are excise taxes on wages and salary earned from employment. With the imposition of these taxes, the relative price of labor increases. Demanders of labor (e.g., employers) will reduce their purchases of labor services through a combination of reducing output and substituting other factors of production (e.g., capital) for labor.¹²² Workers, facing lower wages after the tax increase, might also reduce their supply of labor (e.g., their hours of work) and consume more leisure instead. Workers and employers thus "share" the costs of the tax.¹²³

Because payroll taxes only tax earnings, they introduce an incentive to increase non-earnings income. For example, individuals who are self-employed often can pay themselves lower wages and use these forgone wages to increase the value of their businesses. Capital gains on business assets are not subject to payroll taxes. Simply put, payroll taxes impose a horizontal inequity on earned income, which in turn distorts the allocation

¹²² Because labor is used in producing most other factors of production, the prices of these inputs could also rise with a payroll tax increase. These price increases of other inputs would partially offset the fall in demand for labor services.

¹²³ In an attempt to be fair to employers and employees, Federal law splits the payroll tax burden equally between these two groups. From an economic standpoint, however, it is irrelevant who actually sends in the tax payment to the government. For example, if employers were assessed all of the tax, employers would pass on some of their tax burden to their employees through paying lower wages. If employees "paid" the entire payroll tax, the employees would pressure their employers for higher wages. Determining who really pays the costs of a tax (this is also known as determining the incidence of a tax) is one of the harder questions considered by public finance economists.

between employment which earns income and all other sectors in the economy.

How Fair Are Payroll Taxes? In addition to the horizontal inequities caused by payroll taxes, these taxes also cause substantial vertical inequities. Taxing earnings at a flat rate up to a cap taxes the poor at higher rates than individuals with much higher incomes. In addition, earnings are a much larger fraction of total income for poor employed individuals than for individuals in more comfortable circumstances, or persons who are not in the labor force. Payroll taxes thus place disproportionately heavy burdens on the young who are poor and employed.¹²⁴

Defenders of payroll taxes point to the benefits of the programs that they fund (e.g., Social Security and Medicare). For example, while individuals with high incomes do pay a smaller fraction of these incomes in payroll taxes, these same persons also pay higher total taxes during their lifetimes for

¹²⁴ Currently, some of the regressivity of payroll taxes is being offset by the earned income tax credit (EITC). Tax-paying units with one or more dependent children are eligible for the EITC when they file their income tax return. The EITC provides a 14 percent tax credit for taxable earnings up to the level of \$6,810 in 1990, or \$953.40. This credit is phased out at a 10 percent rate for each dollar of earnings in excess of \$10,730 in 1990, so that no credit is due for earnings in excess of \$20,264 in 1990 (all of these amounts are indexed for inflation). If the amount of the credit exceeds the amount of income taxes owed, tax-paying unit eligible for the EITC still receive the excess of the EITC over income taxes.

The EITC is scheduled to increase to 23 percent (raising the maximum credit from \$953.40 to \$1,566.30 in 1990 dollars) by 1994 for tax-paying units with one dependent child and 25 percent for units with two or more dependent children (the maximum credit is not \$1,702.50 1990 dollars); the phase-out rates are also raised, so no credit is earned for units with earnings in excess of \$20,264 1990 dollars. In addition, a 5 percent additional credit for tax-paying units with children under the age of one (a maximum credit of \$340.50 1990 dollars) and a 6 percent credit (a maximum credit of \$408.60 1990 dollars) for health care costs (including health insurance premiums) for dependent children will also be granted starting in 1991.

While the EITC helps families with low earnings who have dependent children, the credit is not part of the payroll tax system. Raising payroll taxes will still be regressive, unless the EITC is increased (which costs money). For more information on the EITC, interested readers should consult The Office of Management and Budget, *Budget of the United States Government: FY 1992*, Washington, D.C., U.S. Government Printing Office, 1991.

programs which provide either equal benefits to all beneficiaries (e.g., Medicare), or benefits which are highly progressive (e.g., Social Security). Supporters of these entitlement programs and the payroll taxes which support them fear either imposing higher tax rates or raising the cap on taxable earnings, which could erode support for these programs among middle- and upper-income workers. Weighing the costs of the regressivity of the payroll tax with the potential benefits of preserving this social contract among different economic classes is clearly a difficult public policy question.

A final basic issue of the equity and fairness of payroll taxes concerns their impact on different generations. This discussion involves payroll taxes which are used to fund entitlement programs for the elderly. Admittedly, while most of the proposals for expanding access to health care are not specifically targeted at the elderly, many are (e.g., long-term care plans), and many of these build on the current structure of entitlement programs (e.g., Medicare Part C).

As previously mentioned, payroll taxes have typically funded entitlement programs which pay benefits to the elderly. Traditionally, these entitlement programs have been financed on a "pay-as-you-go" basis; that is, current taxes are used to pay for the benefits received by the current elderly. Contrary to the belief of many persons, their lifetime payroll taxes are not being accumulated now to pay for their future benefits from these programs. In a fully mature social insurance system of this type, if the tax rate is constant over time, this does not impose any unfair burden on any particular generation. Each generation will pay a fixed share of its income while they are young to pay for the previous generation's retirement benefits.¹²⁵

¹²⁵ The first elderly generation in a pay-as-you-go social insurance system are clear winners; they receive benefits and pay little or nothing in taxes.

Unfortunately, payroll tax rates do not remain constant over time in most pay-as-you-go social insurance systems. In simple terms, the revenue base for social insurance programs grows at the rate of growth of real wages plus the rate of growth of the working population. Maintaining or even increasing per capita benefits would thus not be a problem, except for the fact that total benefits also depend on the size of the population which receives benefits, which has increased rapidly. To help balance this problem, payroll taxes have steadily increased from 2 percent in 1937 to the current level of 12.4 percent.¹²⁶

To make matters worse, there is a natural inclination to pass the costs of those currently alive to generations not yet born. Payroll tax increases frequently have been postponed, and a great deal of legislation is concerned with raising payroll tax rates at distant, future dates.

Instead of pay-as-you-go systems, it is possible to "pre-fund" the future liabilities of entitlement programs by raising current payroll taxes above the levels of current expenditures and saving the excess in a trust fund. The payroll tax increases that were passed in 1983 were explicitly designed to pre-fund the future liabilities of the baby-boom generation's retirement. Pre-funding, though, suffers from two political problems. First, the political pressure to increase current benefits or lower current taxes during the period of trust fund accumulation (e.g., "the money is just sitting there") can be overwhelming. Second, by law, the trust funds can only be invested in U.S. Government securities. In essence, the Federal Government is writing the trust funds "I.O.U.s" now in return for funds at some later date. When these notes come due, the federal government will have to raise the funds through

¹²⁶ Committee on Ways and Means, U.S. House of Representatives, *Overview of Entitlement Programs*, Washington D.C., U.S. Government Printing Office, May 7, 1991. ("The Green Book.")

future tax increases (probably from general revenues).¹²⁷ This is one more way payroll tax systems can pass current costs on to future generations.¹²⁸

Personal Income Taxes

What Are Personal Income Taxes? In the United States, taxes are assessed on taxable income on a progressive basis. Currently, there are three personal income tax rates (or brackets) in the United States: 15 percent, 28 percent, and 31 percent. "Taxable" income does not directly correspond to any economic definition of income, but is instead determined by law.¹²⁹ The definition of taxable income is highly complex and frequently changes, but determining taxable income consists of two major steps: (1) income from all taxable sources (e.g., wages, rents, interest, etc.) is added and then business expenses are subtracted to determine adjusted gross income (AGI); and (2) the total of personal exemptions¹³⁰ and either the sum of itemized

¹²⁷ Alan J. Auerbach and Laurence J. Kotlikoff, "The Impact of the Demographic Transition on Capital Formation," *Pension Research Council*, Working Paper Series 91-4, July, 1991.

¹²⁸ It is possible that accumulating entitlement program trust funds could have other economic effects; for example, trust funds could alter the aggregate level of saving in the economy. If the accumulating trust funds increased aggregate saving, the extra supply of additional capital could increase investment and stimulate economic growth. It is uncertain, however, what, if any, long-term effects the growing trust funds will have on aggregate savings rates.

¹²⁹ The traditional economic definition of income is also known as the Haig-Simon definition: income is the money value of the net increase to an individual's power to consume during a period. Haig-Simon Income is equal to consumption during the period plus net additions to wealth (which reflect the change in the individual's ability to consume). See Harvey S. Rosen, *Public Finance*, Irwin Publications in Economics, 1985, p. 336.

¹³⁰ For each tax-paying unit (either a single individual or a married couple), an exemption is allowed for each dependent claimed for that tax-paying unit. While again the definition of a dependent frequently changes, dependents usually are the unit's members (e.g., the single individual or the two spouses) and individuals who depend upon the unit's members for economic support, particularly children.

deductions or the standard deduction¹³¹ are subtracted from AGI to determine taxable income.¹³²

How Much Revenue Can Be Raised By Increasing Personal Income Taxes? Personal income taxes currently raise the largest single share of Federal tax revenues. Since the end of the Second World War, personal income taxes have represented 40 to 48 percent of all Federal tax receipts, and the share in FY 1990 stood at 45 percent.¹³³ In FY 1990, \$467 billion was collected in personal income taxes, and these receipts are expected to grow to \$742 billion by FY 1996. Given this underlying pattern of growth, financing options based on raising personal income taxes will tend to raise more revenue in future years.¹³⁴

The different ways of raising personal income taxes are both numerous and diverse, but can be separated into two different categories: (1) raise the percentage of taxable income collected through personal income taxes (raise the rates); and (2) include more sources of income within the definition of taxable income (broaden the base). The focus in this subsection of the paper is on "raising the rates"; the next subsection will discuss "broadening the base."

¹³¹ Many expenses may be deducted from adjusted gross income. For example, charitable contributions and the interest expenses on first and second home mortgages are "deductible." For some households, however, the sum of these itemized deductions (e.g., each itemized deduction must be listed on the tax-paying unit's tax return, and the tax-paying unit must be prepared to prove that the expense actually occurred) is relatively small. Instead of itemizing, these tax-paying units are allowed to deduct the "standard" deduction from their adjusted gross income. In addition to tax deductions, taxable income (and total personal taxes) can also be reduced by tax credits. Tax credits are subtracted directly from the total taxes due to the government after taxable income has been determined.

¹³² Harvey S. Rosen, *Public Finance*, Irwin Publications in Economics, 1985.

¹³³ Office of Management and Budget, *Budget of the United States Government: Fiscal Year 1992*, Washington D.C., U.S. Government Printing Office, 1991.

¹³⁴ *Ibid.*

Although personal income tax rates have been much higher in the past in the United States,¹³⁵ the fraction of Federal revenues collected by the tax has remained remarkably constant (as mentioned above). This constancy can be attributed to three factors: (1) higher personal income tax rates lower the rewards to working and make leisure more attractive, which may lower the personal income tax base;¹³⁶ (2) higher marginal rates increase the attractiveness of tax-advantaged sources of income;¹³⁷ and (3) the incentives to break the law by evading taxes are also increased (e.g., people join the "underground economy").

Even with these caveats, raising the marginal personal income tax rates can still raise substantial amounts of new revenue. A 1990 CBO study determined the potential new revenues that could be raised by increasing the marginal income tax rates in several different ways. The following table indicates that these different alternatives could have raised \$4 to \$19 billion in new revenues in 1991 and that these new revenues could grow rapidly over time (to \$12 to \$45 billion by 1995). In reading this table, it is important to remember that these revenue projections were based on the tax code prior to the changes of OBRA 1991; the current amount of new revenue that could be raised under these options would be somewhat smaller.

¹³⁵ In 1945 at the end of the Second World War, the top personal income tax bracket was 94 percent. (Harvey S. Rosen, *Public Finance*, Irwin Publications in Economics, 1985.)

¹³⁶ The responsiveness of wage earnings to changes in marginal tax rates is a topic of great debate and disagreement among public finance economists. In general, studies have suggested that women (particularly married women) are more likely to reduce their hours or work in response to increases in marginal personal income tax rates than men (particularly prime-age men). This is probably a result of the relatively higher attractiveness of non-market opportunities for women and non-prime-age men (especially men near retirement age).

¹³⁷ Tax-advantaged sources of income include tax shelters, tax-exempt bonds, fringe benefits, etc. If marginal personal income tax rates are higher than corporate income tax rates, some individuals may reduce their tax burdens through "incorporating" themselves.

How Will Raising Income Taxes Affect Economic Incentives? Changing the marginal rates of the personal income tax has very complex effects on the incentive structure and the allocation of resources in the economy.

Analyzing and discussing the vast theoretical and empirical literature on this topic in any depth is a task far beyond the scope of this paper. Instead, a few of the major topics of this debate will be highlighted.

One clear result of raising marginal personal income tax rates would be to raise the attractiveness of non-taxable sources of income. For example, many State and local bonds provide interest income which is exempt from Federal taxes. When marginal tax rates are increased, the after-tax value of the income produced by tax-exempt bonds increases, causing individuals to shift their portfolios away from taxable to non-taxable securities.¹³⁸ While this switch may benefit States and municipalities which offer tax exempt bonds, the allocation of investment resources will be distorted. In addition to tax-free securities, raising marginal tax rates would cause the resources devoted to three other large areas to (inefficiently) increase: (1) owner-occupied housing; (2) pensions and other retirement savings; and (3) employer-provided fringe benefits.

¹³⁸ In a Miller equilibrium, individuals in higher tax brackets will concentrate on purchasing tax-free securities, while persons in lower brackets will purchase taxable securities. Suppose there are two tax brackets: 25 and 50 percent. If taxable bonds (e.g., corporate bonds) offer a 10 percent interest rate, the after-tax rate of return, then the after-tax rate of return for persons in the lower bracket is $(1.00 - 0.25) \cdot 10$ percent = 7.5 percent, and $(1.00 - 0.50) \cdot 10$ percent = 5 percent for persons in the high bracket. Tax-free bonds, then must offer at least a 5 percent rate of return to attract investors in high tax brackets. Notice that if tax-free bonds offer returns higher than 7.5 percent, persons in lower tax brackets will switch from taxable to non-taxable bonds unless the return on taxable bonds rises above 10 percent.

When marginal rates are increased, the relative advantage of tax-free bonds is increased. Suppose tax rates in this example rise from 25 and 50 to 50 and 75 percent. If tax-free bonds offer at least a 5 percent return, persons in both low and high brackets will buy tax-free bonds unless returns on taxable bonds increase.

Table 1

**Projected Revenues from Raising Marginal Personal Income Tax Rates
(CBO Estimates),**

Option	New Additional Revenues (in billions)					Total for Five Years
	1991	1992	1993	1994	1995	
16 and 30 percent rates ^b	\$18.7	\$35.4	\$38.2	\$41.2	\$44.8	\$178.3
5 percent surtax ^c	\$13.5	\$25.7	\$27.7	\$30.0	\$32.6	\$129.3
33 percent bracket ^d	\$3.8	\$7.6	\$8.7	\$10.1	\$11.7	\$41.9
38 percent bracket ^e	\$9.6	\$18.8	\$21.0	\$24.1	\$27.6	\$101.2

^a Prior to OBRA 1990, two marginal tax brackets existed (a 15 and 28 percent bracket). For some taxable income ranges, however, the amount of income subject to the 15 percent marginal rate declined as income increased, resulting in an effective marginal rate of 33 percent (e.g., the tax brackets were 15 percent on lower and moderate incomes, 28 percent on moderate to fairly high incomes, 33 percent on very high incomes, and then fell to 28 for the highest taxable incomes). OBRA 1990 replaced this "bubble" with a 31 percent bracket for incomes at and above this "bubble" range. The CBO projections here are based on the former 15 and 28 percent rates with a bubble. Under current tax law, the new revenues raised would vary (and probably would decrease).

^b Tax rates are raised roughly 6 to 7 percent across all brackets. Under current law, these brackets might be 16, 30, and 33 percent.

^c The 5 percent surtax applies to families who have incomes in excess of the earned income credit (EIC) amount.

^d Brackets here are 15, 28, and 33 percent, where the 33 percent bracket applies to incomes at or above the "bubble" level. This is identical to the current tax code, except the top bracket is 33, not 31 percent. "New" revenues raised by this alternative will be correspondingly lower.

^e This option envisions four tax brackets: (1) 15 percent; (2) 28 percent; (3) 33 percent for the "bubble" income range; and (4) 38 percent above the "bubble." In 1991, the 38 percent range would apply to single individuals earning more than \$101,600 and couple who earn in excess of \$169,350.

SOURCE: Congressional Budget Office, *Reducing the Deficits: Spending and Revenue Options: A Report to the Senate and House Committees on the Budget—Part II*, Washington, DC, U.S. Government Printing Office, February 1990.

While increasing income taxes will result in shifting resources away from taxable to non-taxable sectors of the economy, these tax increases probably will also reduce overall output (beyond the losses incurred from shifting the allocation of resources). Along with the shift toward tax-free securities, increases in the marginal rates of income taxation will lower the after-tax return to savings, which could reduce savings and economic growth.¹³⁹ Higher rates of personal income taxes also could reduce hours worked, as leisure becomes relatively more attractive.

How "Fair" Are Personal Income Tax Increases? No one enjoys paying income taxes. But this hatred of taxes is not a sufficient reason to condemn the personal income tax as being "unfair." In fact, the progressive nature of personal income tax rates certainly allows policy makers to shift a higher share of our societal tax burdens to those most able to pay. Deciding upon

¹³⁹ The responsiveness of savings to the real after-tax interest rate (e.g., the "interest rate elasticity") is actively debated by current economists. Much of the difficulty in measuring this effect is caused by the lack of available data on an individual level (e.g., an ideal data set would follow individuals through time over a long period and record their income, marginal tax rate, the real after-tax interest rates they face, and net worth in each year—such data are not available). Studies instead must rely on aggregate data, which are not very good at measuring individual level effects.

A 1978 study by Boskin determined that increasing the real after-tax interest rate by one percentage point (e.g., an increase in the real interest rate from 2 to 3 percent) would increase aggregate national savings by 20 to 40 percent (e.g., if the national savings rate was 10 percent, a one percent increase in the real after-tax interest rate of one percent would raise national savings to 12 to 14 percent). See Michael J. Boskin, "Taxation, Saving, and the Rate of Interest," *Journal of Political Economy*, April 1978, Vol. 86, pp. S3-S28.

Coleman (1988) noted that the Boskin study relied on a number of questionable assumptions, including an unusual functional form in Boskin's estimated equations and the reliance on determining savings by taking the difference of income and consumption in the National Income Product Accounts (NIPA)—if income and consumption are measured with error, their difference (saving) is measured with considerable error. Coleman used Federal Reserve Board Flow of Funds Data to directly measure savings (as the yearly change in net worth). Coleman found: (1) savings are much less responsive to interest rate changes, and those changes are often negative (e.g., raising the real after-tax interest rate depresses savings); and (2) the responsiveness of savings to interest rates varies by sector of the economy (for example, private versus total savings, or personal versus corporate savings). See Kevin A. Coleman, "The Interest Rate Elasticity of Savings in the U.S., 1948-1984," unpublished paper, April 1988.

an appropriate level of progressivity of the income tax, after deciding upon the needed level of revenue, is clearly a public policy issue.

Without question, making the personal income tax "fair" by apportioning more of the burden to the relatively well-off imposes efficiency costs on society. Arthur Okun has presented a cogent analysis explaining that each society must make a choice about how much economic efficiency it wishes to sacrifice to increase economic equality.¹⁴⁰ After determining this "optimal" level of equality, however, public policy should still attempt to maximize efficiency. It is not clear that raising marginal income tax rates on taxable income is the best answer. Raising the personal exemption or standard deduction, while lowering the marginal rates on high taxable incomes (and raising them on lower taxable incomes) will also result in a "progressive" tax system. This second system of lower marginal rates certainly encourages higher income individuals to increase their taxable incomes; however, it also discourages these same efforts at the lower end of the taxable income scale. Determining which basic approach (e.g., lower marginal rates on the poor and higher marginal rates on the rich versus higher marginal rates on the poor and lower marginal rates on the rich with larger personal exemptions) is more "efficient" is largely an empirical question.

Treating Part of Employer-Provided Health Insurance Benefits as Income

How Can Employer-Provided Health Insurance Benefits Be Taxed? As mentioned in the last subsection, many sources of income are not subject to tax. One of the largest of these sources of income is the value of private health insurance benefits provided by employers. In the United States,

¹⁴⁰ Arthur M. Okun, *Equality and Efficiency: The Big Tradeoff*, Washington D.C., The Brookings Institution, 1975.

employers are encouraged to provide private insurance benefits to their employees by allowing the employer to provide this coverage as a tax-free benefit. In principle, some or all of the actuarial value of these benefits could be treated as taxable income. Other employer-provided fringe benefits are currently taxed in this fashion. For example, only the premiums on the first \$50,000 of benefits for employer-provided term life insurance are tax-exempt; premiums on benefits in excess of this level are taxable income. In theory, some or all of the value of employer-provided health insurance benefits could be treated as income in the same fashion.¹⁴¹

The tax-exempt treatment of employer-provided health insurance plans largely accounts for their widespread popularity. Because employees are able to "purchase" insurance coverage out of their pre-tax income, employees face a lower real price when buying this coverage. Employees (particularly those in higher tax brackets),¹⁴² will request these benefits, and it is in the economic self-interest of their employers to offer this type of coverage.¹⁴³

How Much Revenue Could Be Raised By Taxing Employer-Provided Health Insurance Benefits? Substantial tax revenues could be raised by taxing employer-provided health insurance benefits. Notice that both income

¹⁴¹ What could be difficult would be assigning the value of these benefits for different individuals. For example, health insurance costs more to provide to older workers or workers with a past history of high medical claims. It is not clear whether it is "fairer" to split the value of employer-provided health insurance equally among all employees, or if factors such as age or past medical history should be taken into account. Note, however, that by using actuarial values averaged over employees it can be done, albeit imperfectly.

¹⁴² Individuals in higher tax brackets are more likely to demand more insurance coverage, because: (1) their incomes are higher, and the consumption of health insurance is probably positively related to income; and (2) the real price to upper income individuals is lower by virtue of the higher tax brackets they face.

¹⁴³ Employers will first offer these benefits for the goodwill that providing health insurance coverage produces among their employees. In addition, employers presumably care about the total level of compensation they must offer to attract workers. Tax-free sources of income allows employers to increase the after-tax value of total compensation (e.g., wages and salary and fringe benefits) to their workers.

and payroll taxes would increase, since some employer-provided health insurance benefits would now be part of taxable earnings. In the first set of estimates, the actuarial value of these benefits in excess of \$100 per month for individual and \$250 per month for family plans is taxed; in the second case, all benefits are taxed, but there would be a tax credit of \$20 per month for single plans and \$50 per month for family plans. The second option would grant the tax credits even to tax-paying units which do not receive employer-provided health insurance.

Reviewing the table, one notices that the second option (e.g., taxing all benefits and providing a credit to all tax-paying units) raises considerably more revenue (\$89.4 billion over 5 years) than the first (\$46.7 billion). The second option "broadens the base" far more than the first choice, which accounts for this difference.

Future tax revenues from this source are difficult to predict. The potential tax base (e.g., the amount of employer-provided health insurance benefits subject to the tax) is hard to estimate. The tax base could increase as the size of the labor force increases and if employee compensation in general increases. Conversely, both employers and employees will be encouraged to use less health insurance, since its real (e.g., after-tax) price increases.

How Does Taxing Employer-Provided Health Insurance Benefits Affect Economic Incentives? As discussed above, the tax-advantaged status of employer-provided health insurance benefits helps to explain why these benefits are so frequently provided. If part or all of these benefits are taxed, it is almost certain that fewer plans will be provided and/or the benefits offered by these plans will be less extensive. Many analysts believe that the current tax treatment of these benefits encourages an inefficiently high level of consumption and would favor the total or partial elimination of employer-provided health insurance benefits' tax-exempt status.

**Revenues Raised by Taxing Employer-Provided Health Insurance Benefits
(CBO Projections)**

Tax Source	Annual Revenue in Billions					Total for Five Years
	1991	1992	1993	1994	1995	
Tax Premiums above \$100 per Month for Single and \$250 per Month for Family Plans						
Income Tax	\$8.7	\$5.9	\$5.9	\$6.9	\$7.7	\$30.2
Payroll Tax	\$1.9	\$3.3	\$3.5	\$3.7	\$4.1	\$16.5
Total	\$5.4	\$9.2	\$9.2	\$10.6	\$11.7	\$46.7
Tax All Premiums, but Offer Tax Credits to All Tax-Paying Units						
Income Tax	\$1.9	\$3.8	\$3.6	\$3.8	\$4.1	\$16.6
Payroll Tax	\$8.7	\$14.9	\$15.6	\$16.4	\$17.2	\$72.8
Total	\$10.6	\$18.2	\$19.2	\$20.2	\$21.3	\$89.4

SOURCE: Congressional Budget Office, *Reducing the Deficits: Spending and Revenue Options: A Report to the Senate and House Committees on the Budget—Part II*, Washington D.C., U.S. Government Printing Office, February 1990.

How "Fair" Is Taxing Employer-Provided Health Insurance Benefits? It is difficult to justify the current tax-exempt status of employer-provided health insurance benefits as being "fair." From the standpoint of horizontal equity, defending the tax-exempt status of these benefits is next to impossible for two reasons: (1) many individuals in society (e.g., those who are self-employed, not employed, or are employed by another party but who do not receive any employer-provided health insurance benefits) are differentially

treated by this provision of the tax code; and (2) many other "necessities" of life do not receive the same tax-advantaged status.¹⁴⁴

The tax-exempt status of employer-provided health insurance benefits also fails the vertical equity test. A simple example helps demonstrate this point. Suppose Mr. A earns \$15,000 per year and faces a marginal tax rate of 15 percent per year, while Mr. B earns \$75,000 per year and is in the 28 percent bracket. If an employer-provided health insurance policy for a single individual costs \$2,000, Mr. A saves \$300 per year (\$2,000 times 15 percent), while Mr. B saves \$560 per year (\$2,000 times 28 percent). Since \$2,000 is a much larger fraction of Mr. A's \$15,000 salary than Mr. B's \$75,000 salary, it is also more likely that Mr. A's employer will not provide this coverage. This provision is clearly regressive.¹⁴⁵

Some defenders of the tax-exempt status of these benefits will concede that these benefits are in fact a regressive tax, but justify the exemption because it encourages employers to provide health insurance coverage that would not be offered without the tax incentive. This line of thought also asserts that the firm's administrative economies of scale and the cheaper price of group rather than individual policies¹⁴⁶ allows firms to offer cheaper plans than their employees could buy individually. If employers can provide insurance at cheaper rates, however, the economic incentive to do so is clear.¹⁴⁷

¹⁴⁴ Why is employer-provided medical insurance more of a "necessity" of life than food or clothing?

¹⁴⁵ From an employee's perspective, health insurance is quite similar to other tax-exempt, employer-provided fringe benefits (e.g., some pension or life insurance benefits). More highly compensated workers favor receiving these benefits in lieu of other compensation largely for their tax advantages.

¹⁴⁶ Insurance can be expensive to administer; having one buyer for a large group can be cheaper. Since employers (particularly large employers) represent a large number of individuals, the average costs of the group can be lower than the costs of insuring each person separately—this is the theory of risk pooling.

¹⁴⁷ Suppose the 10,000 employees of Acme Industries can buy individual insurance plans at \$3,000 per year, but Acme can offer similar group coverage at \$2,000 per person. Acme and their employees (perhaps during collective bargaining) can negotiate some price between the \$2,000 and \$3,000 limits which will be mutually beneficial.

Valued-Added Taxes (VAT)

What Is a VAT? A value-added tax (VAT) is a tax on the value added to final products at each stage of production. The "value-added" by a firm is equal to the value of its final sales minus the costs of inputs, or equivalently, the sum of the firm's wages, rents, interest on debt, and gross profits. The total of all value-added in the United States is equal to gross national product, or the final value of all goods and services produced. While the United States does not have a VAT, VATs are quite common in Europe and Latin America. Unlike sales taxes, a VAT is imposed on each stage of production rather than on final sales. The following table helps illustrate the difference between a VAT and a sales tax.

In the table, a farmer is assumed to purchase no inputs, and grows grain and eggs and sells these products to the baker. The farmer's value added is the difference in sales (\$40,000), and purchases of inputs (\$0), and he pays 5 percent times \$40,000 = \$2,000 in VAT taxes. The baker converts the grain and eggs into bread; her value-added is again the difference in sales (\$60,000) and purchases (\$40,000). In the last step, the grocer buys the bread and sells it to customers. The total value-added is \$100,000 (the value of final sales), and the total tax raised is \$5,000. With a traditional sales tax, only sales of final products (e.g., bread bought at a grocery store) are taxed. Notice that the total revenue raised by a VAT or a traditional sales taxes is the same; what differs is the point of collection.

There are several important issues in implementing a VAT: (1) how capital goods purchased by firms are treated; (2) the method of collecting the tax; and (3) special exemptions and tax rates.

Capital goods are permanent investments firms make for production. It is difficult to determine how to treat the purchase of a capital good, because

Taxes Raised by a VAT and a Traditional Sales Tax

	Farmer	Baker	Grocer	Total
Sales	\$40,000	\$60,000	\$100,000	\$200,000
Purchases	\$0	\$40,000	\$60,000	\$100,000
Value-Added	\$40,000	\$20,000	\$40,000	\$100,000
VAT at 5 Percent Rate	\$2,000	\$1,000	\$1,000	\$5,000
Sales Tax at 5 Percent Rate	\$0	\$0	\$5,000	\$5,000

these purchases are one-time costs with long-term benefits. For example, if our baker buys an oven with a loan, should the expense be deductible from VAT in the first year, or should the "purchase" be spread out over the life of the oven for VAT calculations? VAT can treat capital goods purchases in three ways:

- **consumption form**—capital goods are immediately deductible. This is the simplest form of VAT to administer, and is the only type of VAT currently used;
- **income form**—only the depreciation on capital goods is deductible; this spreads the capital deduction over the life of the good. This version of VAT requires the computation of the lives and depreciation schedules for various assets, which is notoriously difficult; and
- **gross product form**—no deductions are allowed for capital goods. Gross product VATs are particularly undesirable, because capital

goods are taxed twice—when sold and when the products they are used to make are sold.

While the details vary, methods of collecting the tax can be divided into three forms:

- **credit method**—firms pay taxes on sales and then receive credits back for the taxes paid on purchases. This system is almost universally used, because it is self-enforcing—firms have a hard time avoiding the tax, because their customers will make sure their suppliers pay the VAT so that the customers can receive their VAT deductions on purchases;¹⁴⁸
- **subtraction method**—firms subtract purchases from sales and pay taxes on the difference. While the subtraction method appears simpler than the credit method, firms downstream are no longer affected by the taxes paid by their suppliers; and
- **addition method**—firms compute their value-added by summing their wages, rent, interest payments, and profits and then paying a VAT. Addition methods are highly complicated to administer, and firms have clear incentives to understate their profits and other sources of value-added.

Like sales taxes, a VAT is rarely collected in all sectors of the economy. For example, clothes and food are often exempt. At the other extreme, certain luxury items are taxed at higher rates (i.e., almost no country with a VAT

¹⁴⁸ The self-enforcing nature of a credit VAT is one its most important differences with a national sales tax. Each stage of a credit VAT acts as a check on the previous stage of production. With a sales tax, tax collection in the system relies on the honesty of sellers of final products and their customers, each of whom has a personal incentive to avoid paying sales taxes.

uses a single rate). Treating home purchases, customer services where no explicit charges are imposed (e.g., free checking at banks), and employee fringe benefits within a VAT system is difficult.¹⁴⁹ As a consequence, very few "pure" VAT systems exist.

How Much Revenue Could a VAT Raise? One of the largest appeals of a VAT is the potential to raise substantial amounts of revenue. A 1987 ICF Incorporated study investigated the amount of revenue that could be raised in 1988 for three different versions of a VAT: (1) a 3 percent VAT on all expenditures except housing; (2) a 3 percent VAT on "non-necessities"—necessities are food prepared at home, clothing, shelter, utility payments, and health care;¹⁵⁰ and (3) a 3 percent VAT on non-necessities which considers the new cost-of-living (COLA) expenses of the proposal.¹⁵¹

The following table presents revenue estimates from that ICF study.¹⁵² From the table, it is clear that exempting non-necessities from the VAT

¹⁴⁹ Charles E. McClure Jr., *The Value-added Tax: Key to Deficit Reduction?*, American Enterprise Institute, University Press of America, Lanham, Maryland, 1987.

¹⁵⁰ Some of these "necessities" could be luxuries; for example, health care could include cosmetic surgery, and food might include snack foods or gourmet items. The revenues raised under these proposals could thus be understated.

¹⁵¹ By imposing a VAT, there is a one-time jump in consumer prices. Since so many government benefit programs are indexed for increases in consumer prices, a VAT will cause expenditures on these programs to rise. These tax increases can be mitigated by adjusting the price index in anticipation of the effects of the VAT.

¹⁵² A few comments and caveats are in order on these revenue estimates. First, prices are assumed to not change except for the increase caused by the VAT—consumers pay the full burden of the tax. In fact, some firms might lower their price and absorb some of the VAT's price increases to offset lower consumer demand. Second, consumers are assumed to not alter their purchases of consumer goods and services. A VAT will cause consumer's real incomes to fall (through price increases), and could then cause a fall in consumer demand ("the income effect"). In addition, the relative price of non-market goods, particularly leisure, falls, causing consumers to purchase fewer market goods and consume more non-market goods ("the substitution effect"). Third, State sales taxes are assumed to be unaffected. Other countries with a VAT only have a national sales tax; integrating a national VAT with local sales taxes could prove difficult. Finally, the tax is assumed to be of the consumption form.

substantially decreases the revenue collected from the tax (from \$64 to \$42 billion). Notice that the COLA cost increases caused by the VAT (\$42 - \$37 = \$5 billion) are not trivial. Since VATs tax the value-added in the economy, revenues from VATs will continue to increase in the future.

**Potential Revenues from VATs
in the United States: 1988**

VAT Alternative	Tax Revenue (in billions)
3 Percent VAT on All Non-Housing Expenditures	\$64
3 Percent VAT on Non-Necessities	\$42
3 Percent VAT on Non-Necessities Considering COLA Costs	\$37

SOURCE: ICF Estimates, 1987.

McClure (1987)¹⁵³ points out that low-rate VATs might be more expensive to collect than other taxes. He cites Treasury Department estimates that place the cost of collecting income taxes at less than 1 percent of the revenue raised; those same estimates place the costs of setting up a VAT at just over \$700 million (in 1986), which is more than one percent of any of the revenue estimates shown in the previous table.

What Are the Economic Impacts of a VAT? It is almost certain that introducing a VAT would cause a one-time increase in the price level,

¹⁵³ McClure, 1987, p. 23.

roughly equal to the amount of the VAT.¹⁵⁴ Further economic consequences are more difficult to assess. As with almost any other tax, a VAT does not tax non-market activities such as leisure. For that reason, it is inevitable that an efficiency "wedge" will be driven between the allocation of market and non-market goods. However, it is virtually impossible to assess the efficiency losses of this inefficient substitution away from "consumption" (or labor) toward "leisure." Even worse, it is even harder to know whether a VAT causes more distortions in the labor/leisure choice than other taxes.

Assessing a VAT's impact on economic efficiency depends on whether the VAT is a new tax or partially (or completely) replaces other levies. Some authors suggest that replacing the current system of personal and corporate income taxation with a variety of VAT plans (including VATs with differential tax rates on various goods) could increase overall efficiency by as much as one percent.¹⁵⁵ While one percent sounds small, it is over \$50 billion in a \$5 trillion economy. Estimates of this type, however, are highly sensitive to particular assumptions employed by the study.

Are VATs Fair? Value-added taxes tend to be regressive in any particular year. The poor spend a higher fraction of their incomes on consumption goods, and because a VAT is typically a consumption tax, the poor of the current year tend to pay a higher fraction of their incomes than the middle class and wealthy in VATs.¹⁵⁶ The 1987 ICF study discussed above considered the incidence of a VAT across income groups. As the previous table indicates, VATs can be highly regressive.

¹⁵⁴ McClure, 1987, p. 39.

¹⁵⁵ Charles L. Ballard, John Karl Scholtz, and John B. Shoven, "The Value-Added Tax: A General Equilibrium Look at its Efficiency and Incidence," paper presented at the NBER Conference on the Effects of Taxation on Capital Formation, West Palm Beach, Florida, February 14-16, 1986.

¹⁵⁶ This conclusion, however, is sensitive on tax rates and consumption mix of any particular VAT. For example, if many "necessities" are exempt from the VAT and "luxury" items are taxed at a sufficiently high rate, a VAT could in theory become a progressive tax.

Many VATs in foreign countries attempt to redress this regressivity problem by exempting certain goods from the tax (e.g., "necessities"). In general, this is a poor way of correcting the regressivity problem of the tax, as it distorts the allocation between specially treated goods and other goods for all individuals and firms; as a consequence, it fails the test of horizontal equity. Instead, direct cash subsidies to the poor (e.g., "negative income taxes") can help offset the possible inequities of the tax without further distorting the allocation of resources across different goods.

Finally, the percentage of current income paid in taxes may not be the best measure of the fairness of a VAT. Current income may be temporarily low (e.g., people have not hit their prime earning years or could be experiencing a temporary spell of unemployment) and recover over a longer term. Consumption may be sustained at high levels during "bad" years out of savings or by borrowing. For very low incomes, consumption may temporarily exceed current income. Economists favor using a lifetime measure of economic resources as the basis of comparison.¹⁵⁷ While determining lifetime measures of economic resources is not easy, economic theory suggests that consumption as a percentage of lifetime earnings varies much less (if at all) across different earnings groups than consumption as a percentage of current income.

"Sin" Taxes—Excise Taxes on Gasoline, Alcohol, and Tobacco

What Are Excise Taxes? Unlike traditional sales taxes or VATs, excise taxes are taxes that are levied on specific products. These taxes take two forms: (1) unit taxes are taxes on a certain amount of a product (e.g., cents per gallon of gasoline); and (2) ad valorem taxes are taxes as a percentage of

¹⁵⁷ Milton Friedman, *A Theory of the Consumption Function*, Princeton, N.J., Princeton University Press, 1957.

**Percentage of Income Paid in Personal Income Taxes and VAT: 1988
3 Percent VAT Assessed on Non-Housing Expenditures**

Consumer Units	Average Percent of Income Paid		
	Income Taxes	Value-Added Tax	Total Taxes
All Income Groups	16.2%	1.9%	19.0%
\$0-4,999	-0.1%	8.1%	8.0%
\$5,000-9,999	0.5%	3.7%	4.2%
\$10,000-14,999	3.0%	3.0%	8.0%
\$15,000-19,999	6.2%	2.0%	8.9%
\$20,000-24,999	2.0%	2.3%	11.0%
\$25,000-29,999	10.5%	2.1%	12.6%
\$30,000-39,999	12.5%	2.0%	14.5%
\$40,000-49,999	14.1%	1.8%	19.0%
\$50,000-74,999	17.3%	1.7%	19.0%
\$75,000+	24.8%	1.2%	26.0%

SOURCE: ICF estimates, 1987.

the product's cost. Excise taxes are assessed at the national, State, and even local levels in the United States, and both unit and ad valorem taxes are common.

How Much Revenue Can be Raised? Total excise tax revenues have declined substantially as a percentage of Federal revenue. In 1950, excise taxes represented over 19.1 percent of Federal revenues, but declined to a

low of 2.9 percent in 1982. Recent tax changes increased excise taxes' share of federal revenues to 4.3 percent by 1983, but the share had declined to 3.4 percent by 1989.¹⁵⁸ The Federal share has declined for several reasons. The majority (over 80 percent)¹⁵⁹ of Federal excise tax revenue comes from taxes on gasoline, alcohol, and tobacco, and these tax rates have not kept pace with the growth of other taxes. Taxes on these products are unit taxes and have rarely been increased. For example, taxes on cigarettes remained at 8 cents per pack from 1951 to 1983, when they were doubled to 16 cents per pack.¹⁶⁰ Ad valorem taxes could be designed to automatically keep pace with inflation, helping to maintain the excise tax share of Federal revenues.¹⁶¹ Consumption of these goods has also not kept pace with general economic growth. Per capita sales of each of these products has either recently stagnated (e.g., gasoline, beer, and wine) or substantially declined (e.g., cigarettes and distilled spirits). Both of these factors help explain the declining share of Federal revenues represented by excise taxes.

The Congressional Budget Office (CBO 1990) recently considered the potential revenues that could be raised by increasing Federal excise taxes on tobacco, alcoholic beverages, and motor fuels. Specifically, the CBO estimated the revenue gains of the following tax increases if implemented on October 1, 1990: (1) doubling the cigarette tax from 16 to 32 cents per pack; (2) equalizing and increasing the tax on all alcoholic beverages to 25 cents per proof ounce—hard liquor taxes rise from \$1.98 to \$2.54 per 750 milliliter bottle of 80-proof liquor, beer taxes rise from 16 to 81 cents per six-pack, and wine taxes rise from 3 to 76 cents per 750 milliliter bottle;

¹⁵⁸ Congressional Budget Office, *Federal Taxation of Tobacco, Alcoholic Beverages, and Motor Fuels*, Washington D.C., U.S. Government Printing Office, June 1990.

¹⁵⁹ *Ibid.*

¹⁶⁰ *Ibid.*

¹⁶¹ Unit tax rates could be tied to some inflation index, and thus automatically increase with the price level.

and (3) gasoline taxes rise from 9 to 21 cents per gallon and diesel fuel taxes from 15 to 27 cents per gallon. The tax gains estimated (for 1990) are:

- \$2.8 billion for the cigarette tax;
- \$7.2 billion for the alcoholic beverages tax; and
- \$12.2 billion for the fuel tax.

Once again, these estimates depend on: (1) how responsive demand is with respect to price; (2) how much other taxes (especially personal income taxes) are affected by the price changes caused by the increases in these excise taxes; and (3) whether differences in total expenditures across income classes are caused by differences in volume or price, particularly for the taxes on alcohol. These estimates assume constant prices for alcoholic beverages across income groups; however, it is likely that middle and upper income individuals purchase more expensive liquor than the poor. If varying prices were assumed, it is likely that excise taxes on liquor would raise less revenue.¹⁶² If past experience is any guide, the potential for future growth in "sin" tax revenues is quite small, since consumption of these items is not likely to increase, and could even fall, especially after the imposition of tax increases.

As part of the Omnibus Budget Reconciliation Act of 1990 (OBRA '90), "sin" taxes were increased by less than the amounts used in the CBO projections. In particular: (1) taxes on distilled spirits were raised from

¹⁶² This is because taxes on liquor are unit taxes. Another effect that could lower revenue is the substitution from lower to higher price alcoholic beverages, since the relative price of higher-priced beverages falls. For example, a ten dollar bottle of wine cost five times the price of a two dollar bottle of wine before a two-dollar-per-bottle tax increase; after the tax increase, the more expensive wine is only three times as expensive.

\$1.98 to \$2.14 per 750 ml bottle of 80-proof liquor, beer from 16 to 32 cents per six-pack, and wine from 3 to 21 cents per 750 ml bottle effective January 1, 1991;¹⁶³ (2) taxes per pack of cigarettes were increased from 16 to 20 cents effective January 1, 1991, and will further increase to 24 cents on January 1, 1992; and (3) taxes on gasoline from 9 to 20 cents per gallon, and diesel fuels from 15 to 20 cents per gallon. The following table presents the Office of Management and Budget's (OMB) estimate of the revenue from these three sources in 1990-1992. Even with these smaller tax increases, "sin" tax revenue is projected to rise more than \$6 billion from 1990 to 1992.

**Federal Revenues from Excise Taxes on Alcoholic Beverages,
Cigarettes, and Gasoline and Diesel Fuel
(Billions of Dollars)**

Source	1990 (Actual)	1991 (Projected)	1992 (Projected)
Alcoholic Beverages	\$5.7	\$7.4	\$8.2
Cigarettes	\$4.0	\$4.6	\$4.7
Gasoline and Diesel Fuel	\$3.2	\$3.6	\$3.8

SOURCE: *Budget of the United States Government: Fiscal Year 1992*, U.S. Government Printing Office, Washington, D.C., 1991.

How Do Excise Taxes Affect Economic Incentives? In general, increasing excise taxes will cause the overall sales of the products affected to fall as their relative prices increase. For this reason, economists generally do not

¹⁶³ Instead of equalizing taxes on alcohol across different categories (as in the CBO projections), OBRA '90 taxed wine at 27.6 percent, and beer at 39.5 percent, of the rate of the tax on distilled spirits.

approve of using excise taxes to raise revenue, because such taxes so directly distort the allocation of economic resources.

Lowering the overall use of certain products, however, can be an explicit goal of public policy. This is particularly true for tobacco, alcoholic beverages, and gasoline. Users of these products cause themselves and others many negative effects. Habitual and heavy users of tobacco and alcohol suffer more disease, have higher rates of mortality, and are less productive employees from higher levels of absenteeism.¹⁶⁴ Passive tobacco smoke may also harm others,¹⁶⁵ while 37 percent of the 18,500 traffic fatalities caused by intoxicated drivers in 1987 were passengers of vehicles, other drivers, and pedestrians.¹⁶⁶ Driving causes congestion, wear and tear on roads, and dangerous emissions and pollutants.¹⁶⁷ Increasing excise taxes could lower consumption and reduce some of these negative effects.

Achieving the societal benefits of cleaner air, fewer abusers of alcohol and tobacco, and better mortality and morbidity resulting from lower use of these products is a laudable goal of public policy. From a strictly economic point of view, however, it is not completely clear that using excise taxes is the best method to achieve this goal. First, many of the costs incurred by users of these products are paid by the user (e.g., the smoker with lung cancer

¹⁶⁴ The number of studies on these topic is truly overwhelming. A few examples are: Department of Health and Human Services, *Reducing the Health Consequences of Smoking: 25 Years of Progress. A Report of the Surgeon General*, DHHS Publication No. (CDC) 89-8411, January 11, 1989; and J.M. Shultz, D.P. Rice, and D.L. Parker, "Alcohol-Related Mortality and Years of Potential Life Lost—United States, 1987," *Morbidity and Mortality Weekly Report*, Vol. 39, No. 11, March 23, 1990.

¹⁶⁵ Department of Health and Human Services, *The Health Consequences of Involuntary Smoking. A Report of the Surgeon General*, DHHS Publication No. (CDC) 87-8398, 1986.

¹⁶⁶ Department of Transportation, National Highway Traffic Safety Administration, "1987 Fatality Facts," 1987.

¹⁶⁷ Congressional Budget Office, *Federal Taxation of Tobacco, Alcoholic Beverages, and Motor Fuels*, Washington D.C., U.S. Government Printing Office, June 1990.

certainly pays many of the costs of his or her medical care);¹⁶⁸ a strict economic analysis would only seek to have the user pay for the costs he or she passes on to the rest of society (e.g., the traffic deaths of third parties, the disease caused by car emissions and cigarette smoke, the higher premiums paid on group medical insurance). Excise taxes falls on both the user and abuser of these products; many users of alcoholic beverages are responsible drinkers, and many areas of the country do not suffer from the pollution and congestion problems caused by too many vehicles in too small an area. Stricter enforcement of drunk driving laws, higher premiums on automobile insurance and private health insurance for heavy users of alcohol and tobacco, and fees for more heavily polluting cars, tolls on heavily traveled roads, and taxes on vehicles which cause excessive road wear might be more effective and efficient means of reducing harmful use of these products than excise taxation.

One more important economic argument for "sin" taxes is to reduce use by discouraging new users. Studies have indicated that excise taxes reduce the use of tobacco and alcohol more by discouraging new use than by reducing the use of habitual users. This is particularly true for teenagers and other young users.¹⁶⁹ Preventing use in this way may have long-run social and economic benefits, particularly if young users underestimate the lifetime risks of using tobacco and alcohol.

¹⁶⁸ To be fair to smokers and users of alcohol, some research suggests that their higher rates of mortality and lower life expectancies actually improve the financial health of many social insurance programs (e.g., Social Security and Medicare), since many of these individuals will die before collecting substantial benefits. For example, see John B. Shoven, Jeffrey O. Sundberg, and John P. Bunker, "The Social Security Cost of Smoking," National Bureau of Economic Research Working Paper No. 2234, Cambridge, MA, May 1987) and Virginia Baxter Wright, "Will Quitting Smoking Help Medicare Solve its Financial Problems," *Inquiry*, Spring 1986, pp. 76-82.

¹⁶⁹ Douglas Coate and Michael Grossman, "Effects of Alcohol Beverage Prices and Legal Drinking Ages on Youth Alcohol Use," *Journal of Law and Economics*, Vol. 31, April 1988.

How "Fair" Are Sin Taxes? Studies indicate that "sin" taxes tend to fall disproportionately on the poor when measured by current income. The regressive nature of excise taxes is reduced if a measure which more closely approximates lifetime economic resources (such as total expenditures) is used. The following table is drawn from the June 1991 CBO study on "sin" taxes. These estimates include an adjustment for the indexing in other public programs (brought about by the increase in the price level) caused by these taxes.¹⁷⁰

From the table, it is clear that these taxes are regressive when measured as a percentage of current income. It is less clear when the tax is considered as a fraction of current expenditures. In fact, the tax on alcohol is actually progressive when measured as a fraction of current expenditures.¹⁷¹

National Lotteries

There has been substantial interest in the use of lotteries for raising revenue at the national level. Currently, 33 States and the District of Columbia have lotteries, and ticket sales have grown from \$5.7 million in 1964 to over \$20.6 billion (estimated) in 1991.¹⁷²

How Much Money Could a National Lottery Raise? Estimating how much revenue could be generated from a national lottery is difficult. Revenues depend not only on ticket sales, but also: (1) advertising and

¹⁷⁰ As with other regressive taxes, the poor could be compensated by increasing other transfers—i.e., food stamps, AFDC payments, or earned income taxes credits, etc.

¹⁷¹ Remember that this model assumes that prices are constant across income groups. If higher income groups do buy more expensive liquor, the progressive nature of this tax could be reduced.

¹⁷² Edward Walsh, "States Increasingly Betting on Gambling for Revenue," *The Washington Post*, Oct. 8, 1991, p. A-1 and A-4.

Effects of "Sin" Tax Increases on Cigarettes, Alcohol, and Motor Fuels as a Percentage of Post-Tax Family Income (Inc.) and Expenditures (Exp.) in 1990

Post-Tax Family Income	Cigarettes		Alcohol		Motor Fuels	
	Inc.	Exp.	Inc.	Exp.	Inc.	Exp.
All Families	0.1	0.4	0.3	0.2	0.4	0.4
Bottom Quintile	0.3	0.1	0.6	0.1	0.6	0.3
Second Quintile	0.2	0.1	0.4	0.2	0.5	0.4
Third Quintile	0.1	0.1	0.3	0.2	0.5	0.4
Fourth Quintile	0.1	0.1	0.3	0.3	0.4	0.4
Fifth Quintile	*	0.1	0.2	0.3	0.2	0.3

* indicates less than 0.05 percent.

SOURCE: CBO simulation model estimates, 1990.

promotional expenses; (2) the marginal tax rates of winners;¹⁷³ and (3) the take-out rate—how much of the ticket price is retained by the government. Projecting revenues is difficult, as sales depend on the size of the jackpot (bigger payoffs tend to generate more sales), the availability of tickets, the take-out rate, and certain competition from other forms of gambling, both legal (e.g., casinos, State lotteries, parimutuel wagering, legalized sports

¹⁷³ Charles T. Clotfelter and Phillip J. Cook, "Implicit Taxation in Lottery Finance," *The National Tax Journal*, Vol. 40, December 1987, pp. 533-546.

Winnings from lottery tickets are taxable income. The authors of this paper estimate that state lottery winnings are taxed roughly a five percent rate at the national level. This rate could increase for a national lottery, particularly if the size of the "jackpots" are high.

gambling) and illegal (e.g., illegal numbers games, illegal sports betting, etc.).

The experience of States suggests that lotteries can raise substantial amounts of revenue. Clotfelter and Cook (1987) estimate that 46 percent of lottery ticket sales are government revenue (41 percent to States, 5 percent to the Federal Government). Borg and Mason (1988) estimated that 42 percent of lottery sales in Illinois became State revenues.¹⁷⁴

Suppose the Federal Government instituted a lottery with a weekly prize and could sell 150 million one-dollar tickets per week. Yearly ticket sales would then reach \$7.8 billion. Next, let half of the weekly sales be remitted to customers as prizes. The weekly jackpot would then reach \$75 million per week, or \$3.9 billion per year.¹⁷⁵ Next, assume that 10 percent of ticket sales is used in promoting sales, developing new products and administration. The following table details potential Federal revenues of this national lottery.

The previous calculations are meant to be an illustration. They are not meant to be an estimate of the potential size of the national lottery market, but instead show the revenues of a typical jackpot lottery of a massive scale.

What Are the Economic Effects of Lotteries? One reason that lotteries are such a popular means of raising revenue is that participation is voluntary. Unlike most other State sources of revenue, lottery sales do not have to be mandated or coerced. This voluntarism has lead some observers to label lotteries a "painless tax."

¹⁷⁴ Mary O. Borg, and Paul M. Mason, "The Budgetary Incidence of a Lottery to Support Education," *The National Tax Journal*, Vol. 41, March 1988, pp. 75-85.

¹⁷⁵ These calculations are in present-value terms. Most lottery jackpots are disbursed in equal nominal payments over a 20-year period; \$75 million discounted at a nominal rate of 7 percent would result in 20 payments of over \$7 million per year.

**Possible Federal Revenues
from a National Lottery**

Ticket Sales	\$7.8 Billion
Less 10 Percent Administration	-\$0.78 Billion
Less Jackpots of 50 Percent of Sales	-\$3.9 Billion
Plus Income Tax Revenues of 28 Percent of Winnings	+\$1.09 Billion
Total Revenue	\$4.21 Billion

SOURCE: Lewin-ICF calculations.

This analysis is misleading. States (and certainly the Federal Government, if a national lottery is approved) must rigorously enforce a monopoly on lottery sales to preserve their revenues. Private competition would surely reduce the take-out rates of national lotteries to a much lower level than the current standard of 50 percent. Economists consider the artificially high take-out rates of lotteries to be an excise tax, similar to the levies placed on cigarettes, alcohol, and motor fuels.¹⁷⁶ When compared to these taxes, the implicit tax rate on lottery sales are actually quite high. For example, Clotfelter and Cook (1987) place the total tax rate on lottery sales at 46 percent, while the average rates on liquor (30 percent), wine (13 percent), beer (12 percent), and tobacco (33 percent) are much lower.

Are Lotteries "Fair"? Without question, the establishment of a government monopoly on lottery sales certainly increases the price faced by potential users. If lottery sales are sensitive to price, this will lower the total sales of

¹⁷⁶ Clotfelter and Cook, 1987; Borg and Mason, 1988.

lottery tickets.¹⁷⁷ Whether lower sales is a social ill or blessing is completely a matter of opinion. If one believes that many buyers of lottery tickets are addicted to a compulsive, destructive habit, reducing sales improves the common welfare. Conversely, if one considers that lottery buyers are making a voluntary and rational economic decision, then the government monopoly on lottery sales is introducing a distortion in the price system and unfairly penalizing the purchasers of lottery tickets.

In study after study of lottery ticket purchasers, a common profile emerges. Lottery ticket sales are highly concentrated; the top one percent of lottery purchasers in California in May 1986 bought over 20 percent of the tickets, and the top 10 percent bought more than two-thirds of all ticket sales.¹⁷⁸ In that same study, educational attainment was negatively associated with purchases. These and other studies also indicate that lower income groups buy a disproportionate share of lottery tickets.

"User" Taxes

What Are "User" Taxes? Many plans which propose to expand the access to health care are targeted to specific groups, particularly the aged. As the group which benefits from these proposals is so distinct, one proposed source of revenue for these plans is special fees or taxes on the beneficiaries. This is the method of financing chosen by the Supplemental Medical Insurance (SMI), or Medicare Part B plan. Medicare-covered elderly are allowed to

¹⁷⁷ This assumes that there are no economies of scale in lottery sales and that private lottery sales are legal. Government might be more efficient at organizing and selling lottery tickets than the private sector, conferring a cost advantage on government lottery sales. Such an advantage appears to be at best quite small, given the retail expertise of the private sector (e.g., lottery tickets could be sold through ATM locations). If private lottery sales are illegal, sales of private tickets would certainly be affected.

¹⁷⁸ Clotfelter and Cook, 1987.

participate in the SMI program in return for level monthly premium payments which cover about 25 percent of the plans's costs.¹⁷⁹

How Much Revenue Can User Taxes Raise? Not surprisingly, user taxes are not popular among those paying the tax. If the plan is sufficiently generous, however, many if not most potential beneficiaries are quite willing to pay these taxes. For example, well over 90 percent of those eligible for Medicare Part B coverage elect the coverage. However, the amount of revenue these taxes can raise is enormous; proponents of a plan which would offer comprehensive home and institutional long-term care benefits to the elderly (e.g., the Medicare Part C proposal) through the Medicare system expect to raise over \$14 billion in user taxes to help finance the plan.¹⁸⁰

User taxes can back-fire, however, if those paying the user taxes consider the tax to be unfair or excessive. This is particularly true if the government plan is designed to offer coverage to an already-insured population. The story of the Medicare Catastrophic Care Act from passage to protest to repeal provides vivid testimony to the risks of this method of financing.¹⁸¹ Part of the plan's financing came from a progressive premium tied to the beneficiaries' incomes. Even though the plan benefitted over 70 percent of the elderly population, Moon (1990) presents four major reasons for its failure: (1) senior citizens felt they had been "deceived" by having to pay a special premium; (2) the package of benefits was complicated, while the financing mechanism appeared to be straightforward and prejudicial to the elderly; (3) many of the elderly were satisfied with their own private (e.g.,

¹⁷⁹ Henry J. Aaron, "A Prescription for Health Care," in Henry J. Aaron, ed., *Setting National Priorities: Policies for the Nineties*, The Brookings Institution, 1990.

¹⁸⁰ Federa and Oettinger, 1991.

¹⁸¹ Marilyn Moon, "The Rise and Fall of the Medicare Catastrophic Care Act," *The National Tax Journal*, Vol. 43, September 1990, pp. 371-381.

Medigap) insurance coverage; and (4) the financing mechanism was means-tested, while the elderly were used to entitlement benefits.¹⁸²

What Are the Economic Effects of User Taxes? User taxes have the intuitive appeal that users of a particular service should pay for that service. Unfortunately, unless the service is fully funded by the user tax, the price faced by beneficiaries is too low (compared to a world without a user tax), introducing a distortion in favor of over-consumption of the services the user tax helps to finance. At the same time, payers of the user tax tend to feel unfairly singled out, and will pressure for the user tax to be reduced or eliminated. Because the interests of beneficiaries of the services provided by a user tax are so homogeneous, this pressure can be overwhelming. The rapid repeal of the Medicare Catastrophic Coverage Act provides clear evidence of the power of such organized special interests.

How Fair Are User Taxes? The controversy and protests surrounding user taxes is an indication that people sharply disagree over their fairness. When used as a source of funding for health care, this debate is especially bitter. For example, there is little protest or debate over the use of tolls for public transportation, road, and bridge projects—paying the toll is viewed as being the same as paying the price for any other consumer good. Medical care, on the other hand, is perceived as right or "entitlement" by members of certain groups.

Many of the elderly believe that they are guaranteed a minimum set of medical services in return for their lifelong contributions to social insurance programs such as Medicare. In the minds of many elderly persons, they have already "paid" for their medical care during their working years, including any new expansions in that coverage. The elderly feel that they are being

¹⁸² Eligibility for entitlement benefits is determined by non-economic criteria, such as age or disability.

cheated by being required to pay additional taxes, fees, or surcharges for new coverage.

This is true even when those payments are tied to the elderly's ability to pay. In plans of that type, a new source of ire is the higher payments required of the elderly at the top end of the income and wealth distribution. These wealthier elderly are particularly upset at being forced "to pay for someone else."

Estate and Gift Taxes

What Are Estate and Gift Taxes? Estate and gift taxes are taxes on the transfer of assets between individuals either at death (estate taxes) or when both parties are alive (gift taxes, or inter vivos transfers). Since 1976, estate and gift taxes have been integrated and are referred to as unified transfer taxes.¹⁸³ Estate and gift taxes must be treated in this unified fashion, or these taxes could be easily avoided. For example, if gifts are not taxed, individuals could avoid all estate taxes by transferring their assets to the heirs as gifts while alive; similarly, if inheritances were not taxed, all gift taxes could be avoided (e.g., gifts could be made in the form of loans which could be secured by the prospect of a future inheritance).

Currently, very little revenue is being raised through the unified transfer tax. In 1990, only \$11.5 billion were raised by the unified transfer tax; the Office of Management and Budget projects unified transfer tax revenues to rise to \$15.7 billion by 1996.¹⁸⁴

¹⁸³ Harvey S. Rosen, *Public Finance*, Irwin Publications in Economics, 1985.

¹⁸⁴ The Office of Management and Budget, *Budget of the United States Government: Fiscal Year 1992*, Washington, D.C., U.S. Government Printing Office, 1991.

The provisions of this tax are the cause of these small revenues. Under present law, individuals can make inter vivos gifts of up to \$10,000 per year to any number of other individuals (the recipients do not have to be related to the giver); each member of a joint tax-paying unit can give a gift of this amount. For example, a married couple with three children could give each child \$20,000 per year (\$10,000 from each parent), for a total of up to \$60,000 in tax-free transfers per year. This provision of the tax code alone would allow all but the wealthiest (or shortest-lived) tax-paying units to transfer all of their assets tax-free.¹⁸⁵

Even without the generous inter vivos gift provisions, taxes are paid on very few estates. For example, all bequests to charity are not taxable. Bequests to one's spouse are also not subject to tax. While bequests to other heirs are taxable at a progressive rate¹⁸⁶, a credit of \$192,800 effectively exempts the first \$600,000 of the gross estate from taxation.¹⁸⁷ Once again, this exemption applies to both members of a joint tax-paying unit; a wealthy couple could thus transfer up to \$1,200,000 to their heirs in two \$600,000 increments.

¹⁸⁵ There is some evidence that wealthy households do not take full advantage of this feature of the unified transfer tax code (see Joseph A. Pechman, *Federal Tax Policy*, Washington, D.C., The Brookings Institution, 1977). Wealthy households may not make inter vivos transfers because they want to maintain control of their own wealth. A student of literature might cite the example of Lear's daughters Goneril and Regan from Shakespeare as the folly of giving up control too soon. More recently, some economists have found economic evidence tying the amount of personal attention received by elderly households from their adult children to the size of that elderly household's bequeathable estate. Large inter vivos gifts would reduce this somewhat cynical motivation for visiting one's elderly, wealthy parents (see B. Douglas Bernheim, Andrei Schleifer, and Lawrence Summers, "The Strategic Bequest Motive," *Journal of Political Economy*, Vol. 93, December 1985, pp. 1045-1076).

¹⁸⁶ These rates are 18 percent on the first \$10,000 of the estate, rising to 55 percent for estates of \$3 million or more; in 1993, the top rate will be 50 percent on estates of \$2.5 million or more, but the graduated scale will be phased out on estates in excess of \$10 million (e.g., another "bubble" will be created).

¹⁸⁷ The gross estate is the sum of present value of the estate's assets plus previous inter vivos gifts minus any of the estate's debts or probate expenses. The rising marginal tax rates on gross estates (e.g., from 18 to 37 percent) worth up to \$600,000 result in a total tax bill of \$192,800; a tax credit of this amount effectively exempts gross estates of less than \$600,000 from taxation.

Transferring even more assets without paying unified transfer taxes is possible. For example, up to an additional \$750,000 of a family farm's value is exempt from the unified transfer tax if the land is still cultivated. Unified transfer taxes on family businesses can be deferred for up to five years and then paid in 10 yearly increments at low interest rates. Previously, generation-skipping trusts could be used to avoid estate taxes. In such a trust, a couple could grant their grandchildren assets in trust and bequeath the income from these assets to the trust's executors (i.e., the grandchildren's parents) during the executors' lives. Taxes were then due only when the grandchildren transferred the trust's assets. While eligibility rules for generation-skipping trusts have been tightened considerably, these instruments can still be used to cleverly avoid paying estate taxes.

Perhaps the most important source of estate tax savings is the treatment of capital gains. A capital gain is the difference between an investment's purchase price and current value. For example, a home which is purchased at \$100,000 and increases in value to \$250,000 10 years later has earned its owner a capital gain of \$150,000.¹⁸⁸ The purchase price of this house is

¹⁸⁸ Taxing capital gains presents two problems: (1) capital gains are realized, not accrued; and (2) capital gains are difficult to index for inflation. Most systems of taxation tax the accrued amount of different income flows; for example, the exact amount of earnings, interest, and dividend income received by tax-paying units can be determined each year. The exact capital gain on many investments, however, can only be determined when an asset is sold (e.g., the gain is realized), and many assets are held for very long periods of time. Other capital gains, such as capital gains from investments in stocks, bonds, and other publicly traded securities, can be measured as accurately on an accrual basis as earnings, interest, and dividend income. In principle, each non-publicly traded asset's change in value could be estimated in each year and taxes paid on the stream of accruals, but the claim is usually made (although often without justification) that estimating capital gains accruals is too difficult and that taxing capital gains on a realization basis is simpler. While this may be true, other sections of the tax code make similar estimates of the yearly changes in the value of certain assets, namely depreciation allowances for business investments.

Taxing capital gains on a realization basis leads to the second problem: the lack of indexation for capital gains. Currently, capital gains are measured on a nominal basis; in the housing example, the nominal capital gain is \$150,000 (\$250,000 - \$100,000). During the same 10-year period, prices have increased so the real capital gain may be much smaller. For example, if prices have doubled, the real capital gain is only \$50,000 (\$250,000 - 2*\$100,000). A more rational, fair system of capital gains taxation

also called the asset's capital gains basis; this basis, however, can change if the asset is improved (e.g., the homeowners build an addition). When assets are transferred through inheritance, the current tax code allows the asset's basis to be "stepped-up" to the asset's current market value. Returning to the simple example, the house which was purchased at \$100,000 and is now worth \$250,000 has its basis stepped-up to \$250,000. If the house is transferred to the widow of a couple at her husband's death and she sells the house for \$250,000, she owes no capital gains taxes.¹⁸⁹

Similarly, if a child inherits the house, the basis is again stepped-up to \$250,000. That child could hold onto the house throughout his or her life, and then bequeath the house to his or her heirs. Once again, the house's basis is stepped-up. In theory, capital gains taxes on such assets can be thoroughly avoided by simply retaining possession of the house within the family through subsequent bequests (although estate taxes might be due on the house if its value exceeds the maximum tax exempt level—now \$600,000).

How Much Revenue Can Be Raised By Increasing Estate and Gift

Taxes? There are two basic ways of raising estate and gift taxes:

(1) lowering the \$600,000 exemption level;¹⁹⁰ and (2) taxing capital gains at death. The CBO has projected revenues from each of these options.¹⁹¹

Under the first alternative, the estate exemption level would be lowered from \$600,000 to \$300,000 so that the top 15 percent (rather than only the top 1

would tax the estimated amount of real capital gains earned in each year as part of income.

¹⁸⁹ The current tax code allows tax-paying units with a member age 55 or over to claim a one-time capital gains exemption of up to \$125,000 on the sale of their principle residence. In this example, the \$150,000 capital gain would be reduced to \$25,000.

¹⁹⁰ One could also raise the marginal tax rates on estates, but lowering the exemption amount raises much more revenue.

¹⁹¹ Congressional Budget Office, *Reducing the Deficit: Spending and Revenue Options: A Report to the House and Senate Committees on the Budget—Part II*, Washington, D.C., U.S. Government Printing Office, February 1990.

percent) of estates pay unified transfer taxes. As the table indicates, estate and gift tax proposals can expect steady increases in the amount of revenue raised over time.

Perhaps the most efficient method of taxing these capital gains at death is through the decedent's last tax return. All undeclared capital gains would have to be declared on this last income tax return and the taxes paid out of the proceeds of the estate. To avoid a capital gains tax placing undue hardship on surviving spouses, gains on assets being inherited by the spouse would be exempt from taxes. As the table below shows, lowering the exemption level would raise \$4.8 billion in revenue from 1991 to 1995, while taxing capital gains at death would raise \$10.1 billion during the same period. The administrative costs of such a tax increase would be minimal, as systems for collecting capital gains taxes and unified transfer currently exist.

How Will Raising Estate and Gift Taxes Affect Economic Incentives?

Estate and gift taxes affect two basic economic decisions: (1) how much wealth will be given to future generations; and (2) the form in which lifetime wealth is held. On the first point, higher estate and gift taxes could reduce the incentive to give future generations wealth. With high estate taxes, the costs of such transfers is high (e.g., the substitution effect discourages leaving estates). Such taxes could reduce lifetime savings (by reducing the size of any bequest motive to save) or could encourage inter vivos transfers between generations. For example, a gift in the form of an expensive education would remain as a tax-free method to bequeath wealth. At the same time, if elderly parents want to leave an estate of a particular value to their children, raising estate taxes could actually increase the lifetime level of savings, since it will require more savings to leave the same after-tax estate (e.g., there could be an income effect). Realistically, the estate and gift tax increases considered here are so small that such effects are probably quite small.

**Projected Revenues from Raising Estate and Gift Taxes
(CBO Estimates)**

Option	Net Additional Revenues (in billions)					Total for 5 Years
	1991	1992	1993	1994	1995	
Lowering Gross Estate Exemption to \$300,000	\$0.0	\$1.0	\$1.1	\$1.3	\$1.5	\$4.8
Taxing Capital Gains at Death on Decedent's Last Income Tax Return ^a	\$0.0	\$1.9	\$2.3	\$2.7	\$3.2	\$10.1

^a For heirs other than spouses, the following provisions are assumed: (1) all capital gains taxes are subtracted from the gross value of the estate when computing estate taxes; (2) the \$125,000 one-time capital gains exclusion on the sale of a principal residence is retained; (3) an additional exemption of \$75,000 is granted; and (4) the lower of the original purchase price or one-half of the current value can be used to determine an asset's basis to avoid the burden of expensive record-keeping.

SOURCE: Congressional Budget Office, *Reducing the Deficit: Spending and Revenue Options: A Report to the Senate and House Committees on the Budget—Part II*, Washington, D.C., U.S. Government Printing Office, February 1990.

Estate and gift taxes may have larger effects on the form in which lifetime assets are held. Since capital gains taxes can currently be deferred through estate transfers, families may hold onto these assets for periods that are too long from a strict economic efficiency perspective; this is often called the "lock-in effect." At the same time, assets which earn capital gains may be inefficiently favored over assets which pay a regular stream of income. For example, investing \$10,000 in real estate may result in higher after-tax returns than investing that same \$10,000 in an interest-bearing account which

earns a higher pre-tax rate of return, if the capital gains on the real estate investment can be avoided through an estate transfer.¹⁹² Taxing capital gains at death would reduce the incentive for these types of inefficient investments.

How "Fair" Are Estate and Gift Tax Increases? Returning for a moment to a strict Haig-Simons definition of income, gifts and inheritances should be taxed because their receipt increases one's ability to consume. For example, if Mr. A and Mr. B both earn \$25,000 per year for 40 years, but Mr. A inherits \$1,000,000, Mr. A can clearly support a higher lifetime level of consumption than Mr. B. On a basic level, then, estate and gift taxes probably promote vertical equity by "leveling the playing field."¹⁹³

Surprisingly, however, it is possible to make a case that raising estate and gift taxes could promote inequality. This line of economic reasoning is due to Joseph Stiglitz.¹⁹⁴ First, if higher estate taxes lead to smaller estates and savings rates (e.g., the substitution effect dominates the income effect), there will be less capital per worker and real wages will fall. Since labor income is distributed more evenly than capital income, lower real wages could increase inequality. Next, taxes on inter vivos gifts might discourage gifts to

¹⁹² Admittedly, investment instruments exist which would allow the income from the interest-bearing account to accrue tax-free for long periods (e.g., IRAs and 401(K) plans). Note, however, that the realization treatment of capital gains by the tax code allows these gains to accrue on the same tax-deferred basis.

¹⁹³ Most gifts and bequests come in large amounts in very short periods of time. In the case of Mr. A, his "income" in one year is \$1,025,000 (e.g., his \$25,000 in earnings plus his \$1,000,000 inheritance). With a progressive income tax, Mr. A may pay a higher amount of his lifetime income (\$2,000,000 = \$1,000,000 + 40*\$25,000) than Mr. C, who earns \$50,000 in each year for 40 years, which is the same lifetime income (40*\$25,000 = \$2,000,000, ignoring any interest or dividend income earned by either man). To make the lifetime tax burdens of Mr. A and Mr. C more equal, the tax code can be adjusted to let Mr. A "income average" his inheritance and spread the inheritance "income" and resulting tax burden over several years.

¹⁹⁴ Joseph E. Stiglitz, "Notes on Estate Taxes, Redistribution, and the Concept of Balanced Growth Path Incidence," *Journal of Political Economy*, Vol. 86, April, 1978, S137-150.

the less well-off, which are meant to "level the playing field." Once again, inequality could increase. Finally, suppose that earnings ability is partially randomly distributed. In other words, while education or hard work will increase earnings, some people will earn more simply because they are more gifted or lucky. Bequests from lucky parents to their less lucky children could reduce intergenerational inequality.

Stiglitz's ideas are certainly thought-provoking, but on balance, raising estate and gift taxes probably promotes fairness. The size of the impacts of the effects Stiglitz mentions is unknown and could well be small. In addition, the revenues raised by estate and gift taxes themselves could be used to reduce inequality by using them to invest in capital improvements (e.g., education and human capital) or transfer income and benefits to the less fortunate (e.g., many options for increasing health care access are specifically targeted to the poor and near poor).



Part Two: Cost Containment



THE PROBLEM OF RISING HEALTH CARE COSTS

The rise in health care spending has become a serious and persistent national concern. It has drawn the close attention of the Congress, the Administration, business leaders, unions, and the general public. Many Americans perceive that the benefits generated from these expenditures, in terms of improved health outcomes and patient satisfaction, do not merit the resources required. At the same time, however, Americans expect the quality of health care in the United States to be unrivaled, demand the maintenance and improvement of that quality over time, and desire the application of new medical technologies. Underlying these attitudes is a basic contradiction: We question whether the spending on many illnesses and conditions is justified and call for containment of costs, yet we only accept the best care, regardless of expense, for our families and friends.

In 1990, Americans spent \$666 billion on health care, or over 12 percent of our Gross Domestic Product, or GDP.¹ Although this level is higher than that of other countries, a high level of spending would probably not, in itself, engender the level of attention currently focused on health care costs by policy makers, business leaders, and the public. The real concern with health care costs is not so much that they are high, but rather, that they are rising so quickly. Health spending between 1976 and 1990 increased by more than twice the rate of growth of the economy.² Because this rate of growth has exceeded the rise in the GDP, the fraction of our resources devoted to health

¹ Health Care Financing Administration, Office of the Actuary, *Unpublished Data from the Office of National Health Statistics*, October 1991.

² *Ibid.*

care spending also increases every year; it is currently projected to reach 17 percent of GNP by the year 2000.³

In recent years, there have also been significant shifts in the financing of health care from government to business as Medicare and Medicaid underpayments have increased dramatically. These shortfalls combined with increasing numbers of uninsured and growing pressures from managed care have resulted in increased cost shifting to privately insured patients. Despite this, government health care expenditures have continued to rise, increasing the burdens on taxpayers and pressure on legislators to contain spending.

This rise in spending cannot be sustained indefinitely. Concern over this issue has resulted in calls from business, government, and consumers for limits on health care spending. However, many questions about controlling health spending remain unanswered. What composes the current level of health care spending? Why is spending rising so quickly? What are the implications for long-term cost control? This paper addresses each of these questions.

A Profile of Health Spending in the United States

Total spending on health care comprises a highly diverse set of services, including hospital care, physicians' services, long-term care, and many other services and products. Care in each sector is typically financed in a different way, although some combination of public and private financing plays a

³ Richard Darman, Director, Office of Management and Budget, Testimony on the Problem of Rising Health Care Costs, before the Senate Finance Committee, April 16, 1991.

prominent role in each sector. Spending in each category has been rising by more than 5 percent in excess of inflation, a rate that in all cases far exceeds growth in GDP.⁴ Spending on health care in the United States far exceeds that in any other industrialized country in both absolute and relative terms.

Composition of Total Health Care Spending

The \$666 billion spent on health care in 1990 includes all expenditures on hospital care, physicians' services, long-term care, administration, and research and construction. Total personal health care expenditures were \$585 billion in 1990, or 88 percent of total health care expenditures. To understand why costs are so high, why they are rising over time, and what might be done to control the rise in spending, it is first necessary to understand what comprises that spending.

The fraction of total health care spending devoted to each sector of the health care system in 1990 is represented in exhibit 1.⁵ Hospital care is the largest sector, accounting for 38 percent of spending. This spending includes acute inpatient and outpatient care, physicians' services billed through the hospital, drugs dispensed during hospitalization, and nursing home-type care administered in hospital facilities. All types of hospitals are contained within this category, including community acute care facilities, for-profit hospitals, Federal and State government hospitals, and inpatient psychiatric hospitals.

Physician care, the second largest category, accounted for 19 percent of health care spending. This spending includes both physician salaries and the

⁴ Health Care Financing Administration, Office of the Actuary, *Unpublished Data From the Office of National Health Statistics*.

⁵ *Ibid.*

EXHIBIT 1
COMPOSITION OF PERSONAL HEALTH SPENDING, 1990

Sector	Expenditures (In billions)	Percent of Total Spending
Hospital Care	256.0	38%
Physicians' Services	125.7	19%
Nursing Home Care	53.1	8%
Other Personal Health Care	150.5	23%
Other Spending	80.9	12%
Total Health Care Expenditures	666.2	100%

SOURCE: Health Care Financing Administration, Office of the Actuary, Unpublished Data from the Office of National Health Statistics, October 1991.

costs of operating physician offices. For both medical physicians and osteopathic physicians, it also includes spending for independent medical laboratory charges. Nursing-home care, which makes up 8 percent of all spending, includes any professionally supervised inpatient nursing care prescribed by a physician, including spending on facilities for the mentally retarded.

Finally, exhibit 1 contains two "other" categories. The section labeled "Other Personal Health Care" contains spending on dental services, the services of other health care professionals, prescription glasses, and other personal

medical equipment. The section "Other Spending" includes public health initiatives, the net costs of health insurance (i.e., those expenditures on health insurance that do not pay for the direct provision of services), research and construction, and other spending not incurred by an individual for direct services. Spending on services other than hospital, physician, and nursing-home care accounted for about 35 percent of the total.

Growth in Total Health Care Spending

Exhibit 2 shows the annual rise in spending in each sector of the health care system expressed in real (inflation-corrected) terms. As will be discussed in the following section, the reasons for growth are as diverse as the type of care provided.

Between 1976 and 1989, the rise in real hospital spending averaged 5.1 percent; however, this average conceals an important trend which warrants special attention. Between 1975 and 1982, hospital costs rose about 6 percent per year above general inflation. Between 1983 and 1986, the years during which Medicare's prospective payment system emerged in the United States, the rise in real hospital costs was slowed to about 2 percent per year. In recent years the historical rate of increase in hospital costs of over 6 percent per year has re-emerged. The attenuation in the rise in costs observed between 1983 and 1986 has been attributed to reductions in length of stay and admissions in hospitals that were observed during this time.⁶

⁶ William B. Schwartz and Daniel N. Mendelson, "Hospital Cost Containment in the 1980s: Hard Lessons Learned and Prospects for the 1990s," *New England Journal of Medicine*. April 11, 1991.

EXHIBIT 2 THE RISE IN SPENDING

Sector	Annualized Real Growth In Spending 1976-1989 ^a
Hospital Care	5.5%
Physicians' Services	5.1%
Nursing Home Care	5.9%
Total Spending	5.4%

^a Real growth refers to the increase in spending above the rate of inflation (as measured by the CPI).

SOURCE: Health Care Financing Administration, Office of the Actuary, Unpublished Data from the Office of National Health Statistics, October 1991.

The rise in spending on physicians' services and nursing home care did not exhibit such dramatic swings in annual rates of growth between 1976 and 1989. Average increases in spending are contained in exhibit 2.

Sources of Financing Personal Health Spending

Insurance is a major feature of all health care markets. With insurance comes the phenomenon of "moral hazard": that insured persons consume a greater amount of health care than they would otherwise. While health insurance benefit packages vary in the degree of cost sharing which is required, patient out-of-pocket costs are typically capped; once out-of-pocket limits are reached, there are no financial incentives for patients to forgo care.

Insured patients typically have few financial barriers to receiving care at the time of an illness.

Because the patient's out-of-pocket cost of health care is lower than the actual cost of services, a greater amount of care will be consumed. When applied to health care, of course, this will depend partially on the nature of the service. For example, anyone suffering from the pain of acute appendicitis would probably elect to have surgical treatment no matter what the cost and regardless of insurance status. On the other hand, consumers are likely to be price sensitive to the cost of elective MRIs for the purpose of diagnosing the cause of back pain.

The presence of insurance is a prominent feature in the market for health care in every industrialized nation, and the United States is no exception. What distinguishes insurance in the United States from most other countries is the range and diversity of insurance available. Henry Aaron has estimated that consumers and businesses buy health insurance from nearly 650 insurance companies.⁷

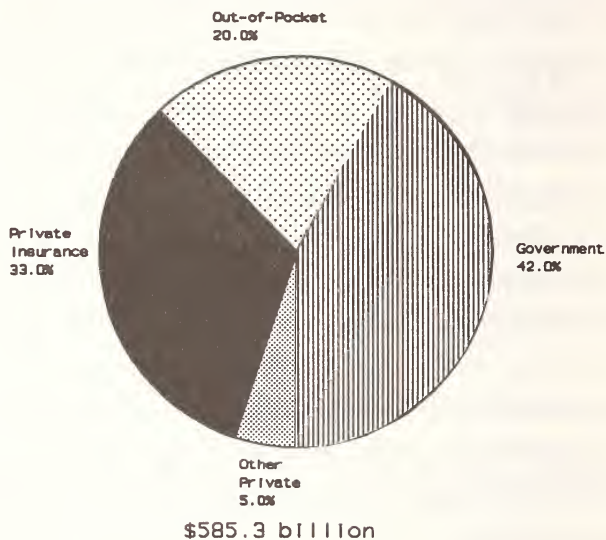
Overall, private insurance, which is generally administered through employers, accounts for 33 percent of personal health care spending.⁸ Government programs, including Medicare, Medicaid, and public health initiatives, account for 42 percent of spending. Out-of-pocket spending accounts for 20 percent of total spending (exhibit 3). However, as discussed above, these aggregate statistics conceal important details regarding the sources of spending in hospitals, physician offices, and nursing homes.

⁷ Henry Aaron, *Serious and Unstable Condition: Financing America's Health Care*, (Washington, DC: Brookings Institution, 1991).

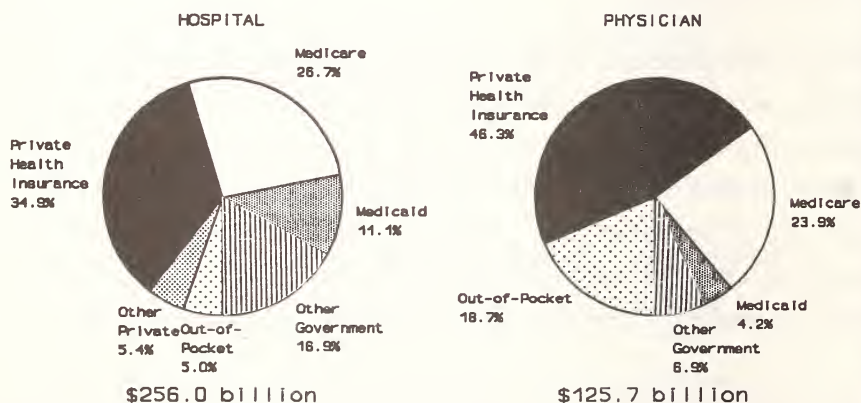
⁸ Health Care Financing Administration, Office of the Actuary, *Unpublished Data from the Office of National Health Statistics*.

EXHIBIT 3

SOURCES OF FINANCING FOR PERSONAL HEALTH CARE SPENDING



SOURCES OF FINANCING FOR HOSPITAL AND PHYSICIAN SERVICES



SOURCE: Health Care Financing Administration, Office of the Actuary:
Unpublished Data from the Office of National Health Statistics, 1991.

In hospitals, virtually all spending is through insurance, and the government plays a highly prominent role. Public funds financed 54.7 percent of all hospital care: Medicare paid for 26.7 percent, Medicaid 11.1 percent, and other programs such as CHAMPUS and the Veterans Administration an additional 16.8 percent. Private health insurance paid for 34.9 percent of care. Out-of-pocket spending by consumers comprised only 5.0 percent of hospital revenues, and 5.4 percent of revenues came from philanthropy and other nonpatient sources.⁹

However, it is important to note that the fraction of health costs paid by the Federal Government has declined in recent years, while the fraction paid by private insurers has increased. This so-called "cost shifting" resulted largely from Medicare's efforts to control the rise in spending through the Prospective Payment System (PPS). As a result, the rise in private insurance premiums reflects in part the spending on new technology for members of the Medicare population. Limits on Medicare reimbursement have also resulted in some hospitals experiencing financial difficulties.

Similar to hospital financing sources, the two largest sources of financing for physicians' services were private insurance and Medicare, which comprised 46.3 and 23.9 percent of expenditures, respectively. Unlike hospital payment, a larger fraction of payments to physicians, 18.7 percent, is composed of out-of-pocket spending. The remaining 11.1 percent of payments were made by Medicaid and other sources. Prior to 1966,

⁹ Health Care Financing Administration, Office of the Actuary, *Unpublished Data from the Office of National Health Statistics*.

93 percent of spending for physicians' services was paid for by private funds.¹⁰

Financing of nursing-home care is highly different from that of acute care, in that both Medicaid and private payments play a more prominent role. Public funds pay for 52 percent of nursing-home spending, and 90 percent of these funds are administered through the Medicaid program. In contrast to acute care, most of the nursing-home care paid out of private funds is paid directly by patients or their families.

The impact of health insurance on government budgets and in the ledgers of American business has been an important force in bringing the rise in health care costs to the forefront of the national debate. In 1980, health care spending accounted for 11 percent of the Federal budget; the CBO has estimated that this will climb to almost 20 percent by 1996.¹¹ The problems for State governments are equally acute as they try to balance increasing demands and shrinking revenues. Business representatives cite the increasing proportion of payroll consumed by health insurance as a growing problem. The involvement of government and employers in providing insurance will be an important force in bringing spending under control.

The Appropriate Level of Health Spending

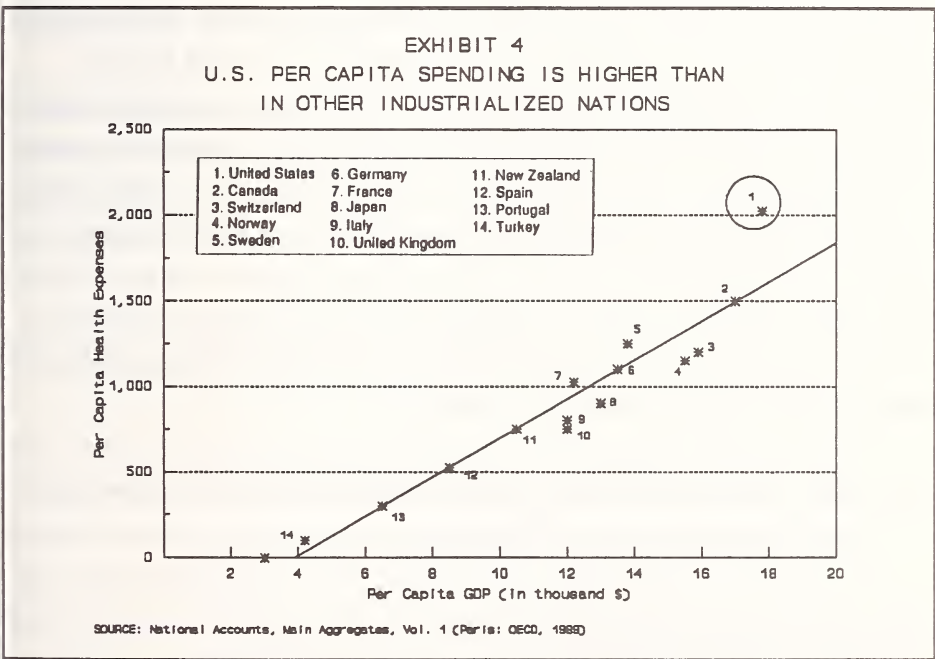
Many policy analysts and politicians have stated or implied that health spending in the United States is too high. However, is 12 percent of the GDP in a prosperous and health-conscious nation too much to spend on

¹⁰ *Ibid.*

¹¹ Congressional Budget Office. *Rising Health Care Costs: Causes, Implications, and Strategies*. U.S. Government Printing Office, 1991.

health care in the face of a technological revolution? Given that the fraction of the GDP devoted to health spending is rising, what level of spending should not be exceeded? This section raises these questions and discusses potential answers.

International comparisons can provide a perspective on health care spending in the U.S. Our spending is the highest in the world, both in dollars per capita and as a fraction of our total wealth. Exhibit 4 plots per capita health expenditures and per capita GDP for 14 industrialized nations. As GDP increases, so do per capita health expenditures; in fact, there appears to be a discernible relationship between spending on health and national wealth for most nations. However, the U.S. spends more than one would expect on health care, even given our high per capita GDP.



A number of factors may explain why spending in the United States is so high. Some of the variation is due to the fact that these figures are not corrected for the age of population and other factors that might affect the level of spending. But these demographic variations are unlikely to explain the whole difference. In fact, when spending comparisons are age-adjusted, the U.S. still spends a higher proportion of GDP than other nations. For example, in 1987 the U.S. spent 9.7 percent of GDP on health care; with a population profile similar to Canada's, it would have spent 0.3 percent less.¹² The differences in spending have been attributed to a wide variety of factors, including the presence of health care rationing and the social orientation of the Nation. These international comparisons are discussed in more detail in another paper.

Although health care spending in the U.S. is high relative to other countries, this does not necessarily mean that our spending is excessive. If Americans believed that benefits merit this level of expenditure, we might be less concerned with the proportion of GDP devoted to health care. Increasingly, however, many Americans do not perceive that the value they are receiving justifies the expense. The apparent paradox of simultaneously rapidly rising health care expenditures, growing gaps in access, and an undistinguished record of health outcomes relative to other nations suggests to many that the U.S. health care system has not targeted resources or utilized its capacity in an efficient manner. There are a number of reasons why a competitive market might not allocate resources optimally.

- The presence of insurance increases demand beyond a true market expression of the value of the health care.

¹² Henry Aaron, *Serious and Unstable Condition: Financing America's Health Care*.

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- Many Americans believe that access to basic care is a right that should be extended to all in our society, a result that would not be expected under a free market.
 - The medical marketplace is characterized by imperfect information, barriers to entry, and control by suppliers over the quantity of services demanded.
 - Health spending enjoys a favorable tax status.

The view that spending is not commensurate with value could also result from overspending due to insurance or a number of other economic issues. Many Americans also believe that waste and inefficiency in the health care system results in services being overpriced and that care of little value is sometimes provided to patients.

There is no single "right" level of health spending for the U.S. As we have discussed, the level of spending as determined by the free market would not be expected to be optimal. Future levels of spending are thus likely to be determined on the basis of public debate and deliberation by elected officials.

Causes of Rising Expenditures

The reasons for the rise in spending are not well understood by policy makers today; yet they are crucial to controlling health care costs. Spending is rising because of technological improvement, increases in the costs of labor and supplies, and demographic trends. Unfortunately for those who seek to control spending, most of the increases in health care spending cannot

be affected in the short run without confronting tradeoffs with respect to access to care.

The Rise in Acute Care Spending

Spending on hospitals and physicians' services has increased primarily because of (1) the proliferation of new medical technology; (2) the rise in costs of labor and supplies necessary to provide health care; (3) the aging and growth of the population; and (4) the presence of insurance. Other factors many have held responsible for the increase in costs are (1) unnecessary or inappropriate care and (2) medical malpractice. This section discusses each of these factors in turn.

The Role of Technological Advance. The proliferation of new technologies during the past decade has contributed substantially to the rise in acute care spending. There have been a few cases in which a new therapy reduces costs. For example, thrombolytic therapy can reverse an expanding myocardial infarction if administered early and expertly. Laser therapy has moved cataract surgery from the inpatient to the outpatient setting, thereby reducing the costs per case.

However, most new technology has actually increased spending both by introducing new interventions not previously possible and by adapting existing interventions to serve a broader patient base. Some interventions that do save money in the short run have actually resulted in increased spending in the long run because they prevent relatively inexpensive deaths. For example, one study indicated that reducing the number of smokers in the Medicare program would increase overall program costs, since more expensive care would be required if enrollees did not experience the

consequences of smoking.¹³ Americans clearly demand the benefits of technologies and information that promises to improve their health. However, it is usually the case that new therapies serve to increase the overall costs of care.

Spending on technology involves both the cost of new equipment and its operation and maintenance. For example, diagnostic therapies such as Magnetic Resonance Imaging (MRI) require not only the facility in which images are made, but also technicians trained in the proper use of the equipment and physicians who understand the new output. The costs of operating new capital equipment often exceed the amortized cost of the equipment itself. Rarely does a technological innovation decrease the amount of time spent by physicians, since new therapies often open the door to an increased base of patients and new therapies often supplement rather than replace the original procedure.

If left unchecked by efforts to contain the rise in spending, technological advance will continue to fuel the rise in spending. Aaron and Schwartz identify a number of such technologies and the expected dollar impact if they are fully utilized:¹⁴

- Erythropoietin, a hormone that stimulates production of red blood cells has become available for severe anemia associated with chronic renal failure. This drug will cost about \$10,000 per year and be medically indicated in at least 80,000 patients, resulting in increased expenditures of \$800 million annually.

¹³ Virginia Baxter Wright, "Will Quitting Smoking Help Medicare Solve its Financial Problems?" *Inquiry*, Vol. 23, pp.76-82.

¹⁴ Henry Aaron and William Schwartz, "Rationing Health Care: The Choice Before Us," *Science*, Vol. 247, pp. 418-422.

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- Automatic implantable cardiac defibrillator, a device that is activated when the heart develops life-threatening arrhythmia, could be used in at least 20,000 candidates at a cost of about \$45,000, adding close to another billion dollars of spending.
 - Low osmolar contrast media, a radiopaque agent that can be used in a variety of radiologic interventions with a lower rate of complication, could be used in about 10 million examinations at a cost of about \$1 billion per year.
 - Cholesterol screening programs to reduce blood cholesterol levels. If cholesterol screening programs were followed by all Americans, the total cost is estimated to exceed \$50 billion a year.

Some of these technologic advances introduce only small marginal benefits at a high expense. For example, low osmolar contrast media might save as many as 300 lives, at a cost of about \$3 million per life saved.¹⁵ A study of a new test for the AIDS antigen (HIV-Ag) indicated that implementing this new precautionary measure would save about one life per year at a cost of approximately \$40 million.¹⁶ Given the American public's demand for the best medicine possible, the lack of price sensitivity, and the threat of physician malpractice, these and other expensive interventions are likely to be adopted in the short run without regard to cost.

¹⁵ Peter D. Jacobson and John Rosenquist. "The Introduction of Low-Osmolar Contrast Agents in Radiology: Medical Economic, Legal, and Public Policy Issues." *Journal of the American Medical Association*, Vol. 260, pp. 1586-1591.

¹⁶ Daniel N. Mendelson and S. Gerald Sandler, M.D., "A Model for Estimating Incremental Benefits and Costs of Testing Donated Blood for Human Immunodeficiency Virus Antigen (HIV-Ag)," *Transfusion*, January 1990.

It is unclear exactly what fraction of the rise in hospital and physician spending results from technological advance. As discussed above, technological advance produces a variety of expenditures in a hospital, including the costs of capital equipment, the labor costs associated with operating the equipment, and the costs of administering the service. The effect of technology is thus usually calculated by subtracting the known influence of all other factors which can readily be understood and then attributing the residual to technology.

This means of quantifying the influence of technology, while methodologically unsatisfactory, has produced largely consistent results in a number of different studies. Hurdle and Pope estimated that almost one-half of the increase in physician spending in the Medicare program resulted from "increases in intensity" of services or technological advance.¹⁷ Sloan and Schwartz estimated that a real increase in spending on physicians' services of about 2.5 percentage points resulted from technology.¹⁸ Schwartz also attributes about half of the real increase in hospital costs to the introduction of new medical technology by the same method.¹⁹

The Cost of Labor and Supplies. Spending on labor and supplies by acute care providers increases substantially every year for two reasons: (1) an increase in the intensity of services provided and (2) medical cost inflation. As new technologies are implemented and as the population ages, more labor and supplies are necessary. The latter point, more subtle but no less

¹⁷ Sylvia Hurdle and Gregory C. Pope, "Physician Productivity: Trends and Determinants," *Inquiry*, Vol. 26 (Spring 1989), pp. 100-115.

¹⁸ F. A. Sloan and W. B. Schwartz, "More Doctors, What Will They Cost? - Physician Income As Supply Expands," *JAMA*, Vol. 249 (February 11, 1983), pp. 766-9.

¹⁹ W. B. Schwartz, "The Inevitable Failure of Current Cost-Containment Strategies. Why They Can Provide Only Temporary Relief," *JAMA*, Vol. 257 (January 8, 1987), pp. 220-4.

important, is that the rise in the cost of medical inputs typically exceeds general cost inflation by about two percentage points each year.²⁰ This applies to both labor and supplies.

The rising cost of labor is a continual problem in any service industry, since it is difficult to substitute technological improvement for professional expertise. This point was first made by Baumol, who suggested that as automation and other production technology reduce the labor required to produce many goods, the relative cost of service-intensive products will rise.²¹ As discussed above, most new medical technology does not reduce the amount of time spent by a health professional providing a given service. Because over one-half of input costs for hospitals and physicians represent labor, increases in the relative costs can be expected to contribute substantially to the annual rise in spending.²²

The recent shortage of nurses and the resulting increases in nursing salaries illustrate that if a hospital wants to recruit and retain quality personnel, continued increases in salary are necessary. In order to remain competitive with other opportunities available to nurses, many hospitals have had to increase the amount that nurses are paid by up to 40 percent. Physician salaries have risen substantially over the past 5 years.²³ The amount of time that physicians spend with patients has also increased, a trend that has been

²⁰ Bureau of Labor Statistics, *Hospital Input Price Index*, 1990.

²¹ William G. Baumol and William G. Bowen, *Performing Arts: The Economic Dilemma*, Cambridge, MA: MIT Press, 1966.

²² Bureau of Labor Statistics, *Hospital Input Price Index*.

²³ William B. Schwartz and Daniel N. Mendelson, "No Evidence of an Emerging Physician Surplus: An Analysis of Change in Physician Work Load and Income", *Journal of the American Medical Association*, January 26, 1990.

attributed to the increased use of new procedures and technological services.²⁴

Input costs other than labor also fuel the steady rise in hospital costs.²⁵ Pharmaceutical prices have risen at a rate exceeding 10 percent per year. The cost of inputs has also risen owing to increases in quality. For example, whole blood represents an input that has risen steadily in costs as a result of increasingly sophisticated tests for HIV and other impurities.²⁶

To the extent that physicians also use supplies and equipment, these costs have risen comparably to those of the hospital discussed above; data from the American Medical Association indicate that the cost of medical supplies is rising at a rate similar to the rise in the hospital input price index.²⁷ Physicians also often employ nurses or allied health personnel. As discussed in connection with hospitals, recent shortages of such workers have increased the cost of nurse time substantially in recent years. Finally, physicians have also borne the increased cost of preventing AIDS transmission.

The Contribution of Demography. The population of the United States is both aging and growing. Contrary to general expectations, however, aging accounts for only a small portion of the rise in acute care spending. Less than one-half of one percentage point of the annual increase in hospital costs is explained by the rise in the proportion of the population older than 65.²⁸ Although the elderly spend about 2.5 times as much on hospital care as do

²⁴ Sylvia Hurdle and Gregory C. Pope, "Physician Productivity: Trends and Determinants."

²⁵ Bureau of Labor Statistics, *Hospital Input Price Index*.

²⁶ Daniel N. Mendelson and S. Gerald Sandler, "A Model for Estimating Incremental Benefits and Costs of Testing Donated Blood for Human Immunodeficiency Virus Antigen (HIV-Ag)."

²⁷ American Hospital Association, *Hospital Statistics 1989-90 Edition*, Chicago, 1990.

²⁸ Office of National Cost Estimates, "National Health Expenditures, 1988," *Health Care Financing Review*, Vol. 11 (Summer 1990), pp. 1-41.

those under age 65, changes in demography are slow enough to limit the impact on the rise in health care costs in any given year.

The growth of the population has more of an effect on acute care costs. In the physician sector, population growth of about 0.9 percent per year, is reflected in a similar increase in costs.²⁹ It has been assumed that this same relationship applies in the case of hospital care. On balance, aging and the growth of the population thus account for about a 1 percent increase in acute care costs each year.

The Role of Health Insurance. The presence of health insurance clearly adds to the rise in health care costs, although the magnitude of this effect is uncertain. Using a randomized controlled experiment, Willard Manning and others at the RAND Corporation studied this phenomenon and found that, on average, a 10 percent reduction in the price to the consumer would increase the consumption of health care by 1 to 2 percent during the early 1980s.³⁰ Henry Aaron uses this figure to estimate that the direct effect of insurance would have been expected to result in an increase in spending on health care of only 8 to 16 percent between 1950 and 1983, concluding that expansion of health insurance had little direct effect on spending.³¹

However, as Aaron recognizes, this calculation does not adequately represent the effect of health insurance on the rise in spending in this country. First, the presence of insurance lent financial security to hospitals and allowed

²⁹ F. A. Sloan and W. B. Schwartz, "More Doctors: What Will They Cost? - Physician Income As Supply Expands." The incremental costs of a population growth should be about equal to the marginal costs of providing the service. It has typically been the case that the marginal costs of acute care services are close to the average costs of those services.

³⁰ Manning W., et al. *Health Insurance and the Demand for Medical Care: Evidence from a Controlled Randomized Experiment*. (The Rand Corporation, 1988).

³¹ Henry Aaron, *Serious and Unstable Condition: Financing America's Health Care*.

many to build new wings or purchase new capital equipment; such costs are not included in the above calculation. Second, the RAND results probably understate the effect of insurance because of problems in self-selection among experimental subjects and the difficulty of finding an adequate control group. Third, the nature of treatment has undoubtedly changed since the completion of the RAND study (the early 1980's); the advent of highly expensive treatments such as perinatal care for babies with AIDS and the increased use of transplantation suggests that the effect of insurance on demand currently might be greater.

The effect of insurance on the historical rise in costs is thus unclear; however, this is likely to be of little import in the future. All of the major industrialized countries have cultivated insurance programs for health care coverage. There appears to be a consensus that the advantages that insurance brings (e.g., reduced risk and reduced worry) outweigh the disadvantages. While coverage limits and deductibles may be changed at the margin, it is unlikely there will be a major reduction in the quantity of health insurance used in this country in the near future.

Other Factors Affecting Health Care Costs. A number of other factors contribute to the rise in health care spending. Many of these factors have been the focus of recent cost-containment efforts.

Unnecessary Care and Administrative Costs. Many policy analysts believe that by reducing unnecessary care and administrative waste, the rise in costs may be brought under control. The impact of reducing administrative costs is questionable.³² Although the rise in costs may be attenuated as

³² Arnold S. Relman, "Is Rationing Inevitable?" *New England Journal of Medicine*, June 21, 1990, pp. 1809-10; and Joseph Califano, *America's Health Care Revolution*, (New York: Random House, 1986).

unnecessary care and waste are eliminated from the health care system, such actions cannot be expected to reduce the long-run rise in health expenditures. Unnecessary care and administrative costs are perceived to be inflating health expenditures, but they have not been found to be rising or contributing to the rise in costs. If the amount of unnecessary care and the level of administrative costs can be reduced, this could be expected to reduce the base of expenditures but not to reduce the long-run growth in spending. This topic is treated in more depth in our separate report on the topic.

Medical Malpractice. The costs of medical malpractice insurance premiums is another factor: Although spending on malpractice has received much attention in recent years, the fraction of acute care spending composed of these costs is small. Hospital malpractice costs increased total hospital costs between 1983 and 1985 by an average of only 0.17 percent annually.³³ Physician malpractice premiums represented only about 3.4 percent of physician income in 1989;³⁴ because this is such a small portion of overall costs, even a large increase in any given year would have only a small effect on the rise in costs.

It is harder to estimate the portion of the rise in spending that results from "defensive medicine," or the provision of care for the sole purpose of avoiding malpractice litigation. Some physicians believe that they must provide certain laboratory tests or (less commonly) procedures in order to avoid litigation. Such behavior is often associated with small incremental

³³ Lewin/ICF calculation. Annual hospital malpractice costs taken from: General Accounting Office, *Nursing Homes: Admission Problems for Medicaid Recipients and Attempts to Solve Them*. Annual hospital costs taken from: American Hospital Association, *Hospital Statistics 1989-90 Edition*, (Chicago: AHA, 1989).

³⁴ F. A. Sloan, R. R. Bovbjerg, and P. Githens. *Insuring Medical Malpractice*. Oxford University Press, forthcoming.

improvements in the standard of care; it is thus difficult to distinguish between unnecessary tests and those providing marginal benefits much discussed but very difficult to measure directly. Moser and Musacchio estimated that 30 percent of the cost of professional liability was due to direct payment of premiums, with the remaining 70 percent largely due to the practice of defensive medicine.³⁵ Another form of defensive medicine might be the refusal to see patients who are perceived as high risk, although there is no evidence that this practice is occurring.

Even including defensive medicine, it is highly unlikely that malpractice costs contribute substantially to the rise in costs. Moser and Musacchio estimated that professional liability contributed about one percentage point to the annual rate of growth in physician expenditures between 1982 and 1989.³⁶ Furthermore, the small reductions in malpractice costs (which might attenuate the rise in spending for some time) will be difficult to achieve. Our legal system serves two distinct purposes: (1) to compensate innocent victims of poor medical practice and (2) to send a proper signal to physicians regarding what constitutes proper medical practice. Americans have retained the right to sue in the vast majority of instances, ceding only in cases of workman's compensation and a few other isolated areas. Short of such massive reform, it is unlikely that either the practice of defensive medicine or high premiums will be substantially affected.

³⁵ J. Moser, and R. Musacchio, "The Cost of Medical Professional Liability in the 1980s," *Medical Practice Management*, Summer 1991.

³⁶ J. Moser, and R. Musacchio, "The Cost of Medical Professional Liability."

Rise in Long-Term Care Spending

The rise in long-term care spending has even exceeded the rise in spending on acute care services. The rise in spending on nursing homes has occurred primarily for two reasons: (1) increased intensity of care and (2) increased quality assurance requirements. Compared to acute care, the rise in nursing-home spending is caused by both similar and different market features. The primary similarity to acute care is that price inflation in nursing homes far exceeds general inflation because the industry is labor intensive.³⁷ However, there are also differences. Nursing homes require fewer technologically sophisticated inputs, and as such, technology has not contributed substantially to the rise in costs. By contrast, the aging of the population has contributed more to rise in nursing home spending.

Increased Intensity. Over the past decade, a dramatic increase in the intensity of nursing home care resulted from a variety of factors. First, spending per patient has increased because of demographics; among those older than age 65 there has been a sustained growth in the older age groups.³⁸ The population from which the nursing home draws its patients is thus older, and consequently sicker, than ever before.

However, increases in the intensity of care provided in nursing homes also resulted from a number of conscious public policy initiatives. One of the goals of Medicare's system of prospective payment for hospitals, implemented in the early 1980s, was to reduce the use of acute care hospital services. Although members of this population were less acutely ill than the

³⁷ Office of National Cost Estimates, "National Health Expenditures, 1988."

³⁸ Judith Feder and William Scanlon, "The Shortage of Nursing Home Beds," *Health Politics, Policy, and Law*, Vol. 4 (Winter 1980), pp. 725-9.

typical hospital patient, they were more acutely ill than the typical nursing home patient. The shift of patients from hospitals to long-term care facilities, which commonly occurred during the 1980s, resulted in increased intensity in nursing homes.

Another public policy effort which resulted in increased intensity of care were efforts by the States to restrict entry into nursing homes to only the sickest patients. These measures were adopted in order to ensure that those who needed care most received it, given restrictions on the number of beds that could be operated in many States. The result was an increase in the level of disability among patients in nursing homes and a commensurate increase in the intensity of services provided.

Increased Quality Assurance. Spending has also increased owing to an improvement in the quality of basic services. There has been an increase in expectations of the quality of care and proliferation of legislation to ensure it. Quality expectations first came to the forefront with Federal hearings on the subject conducted by Representative John Moss in the early 1970s. The Federal Nursing Home Reform Act, passed under OBRA '87, formalized many of the basic quality requirements for Federal funding. There has also been legislation in many States which ties the level of Medicaid reimbursement to nursing home performance, as determined by surprise quality inspections.

Implications for Future Cost Containment

The foregoing discussion was intended to inform the reader of the problem of rising health care costs: what composes spending on health care, why costs are rising, and why many perceive that a problem exists. However, these

results also have important implications regarding past initiatives to contain costs and efforts to contain costs in the future.

As we have shown, the largest target for containment of health care costs is the acute care sector. Hospital spending accounts for nearly 40 percent of total spending, and physician expenditures an additional 20 percent. Both of these sectors are also characterized by a strong government presence in financing and the provision of care. It is thus natural that each would have been targeted in past cost-containment efforts.

There are a variety of efforts that can probably be made to reduce the level of acute care costs without compromising patient care. Administrative costs can probably be reduced to some advantage. In addition, there are probably still excess hospital admissions and some care provided that is of no benefit to the patient. However, it is highly important to understand that affecting these targets will not influence the long-term rise in spending, since none of these factors is actually causing the long-term rise in spending. As observed during the early 1980s, when efforts to control hospital spending led to decreased hospital days and admissions, such efforts will attenuate the rise in spending; however, when savings have been realized, the original rise in spending may re-emerge.

If costs are to be contained in the long run, policy makers will have to affect the factors that cause the rise in spending. In acute care, the primary factors are the diffusion of new technology, the rise in input prices, and demographic changes. As we have discussed, it is practically impossible to control the rise in input prices (e.g., labor and supplies) and the costs of aging and population growth. This leaves only the diffusion of technology and other factors as a substantial target for control of the rise in costs. And because spending on technology inevitably involves improvements in patient care, this

too will be difficult to control even if it is a specific goal of government regulators.

In the long-term care sector, costs will be equally difficult to control, but for different reasons. Spending on nursing home services has been rising owing to other factors, most notably, increased intensity of patients and increased quality of services. Each of these trends can be expected to continue in the future, and demand for such care will thus continue to increase. It is also reasonable to expect that quality will continue to improve over time, as this has been a major focus of legislation and public interest. Efforts to control costs in States by restricting capacity have been, and will continue to be, somewhat successful. In contrast to hospitals, nursing-home occupancy rates rarely dip below 90 percent, and restrictions on the supply of services have thus been effective in restricting the rise in spending. However, restricting the supply of nursing-home services can potentially also limit access to care if alternatives are not provided to patients.

Controlling long-term care spending is highly important for States that finance a substantial portion of this spending. However, it is important to point out that nursing home spending composes less than ten percent of overall health care costs. Controlling the rise in spending in this sector will thus do little to affect the overall increase in health spending. Likewise, controlling costs in smaller sectors such as dentistry and home health care will have little effect on overall spending.

Effective long-term control of health spending in the United States poses daunting challenges for future legislators. Some small incremental savings will be possible by improving the efficiency and effectiveness of health care providers. However, once these savings have been achieved, legislators will be able to control spending only by targeting the factors responsible for the

rise in spending. Cost-saving technologies may ultimately be the means by which the practice of medicine continues to improve without a rise in costs that is untenable to the American public. However, until such technologies are diffused, legislators will continue to face difficult choices between containing the rise in costs and restricting access to care.

CONTROLLING THE COSTS OF ADMINISTRATION

Recently, the costs of administering the U.S. health care system have been the subject of much debate. Many believe that administrative costs are excessive and contribute to rising health care costs and high rates of uninsurance. Administrative costs have become the target of those who believe that by reducing these costs, the U.S. can decrease significantly the amount spent on health care without further eroding access or adopting draconian cost-containment measures.

At the center of the debate over administrative costs is the question of how much pluralism in the health care system we are willing to pay for. The costs of administering a health care system with multiple payers does cost more than one with a single payer, but no agreement has been reached on how much more. In addition, the full costs and benefits of pluralism compared with those of a single payer approach have not been adequately addressed in the debate over administrative costs.

This paper examines the costs of administering the U.S. health care system and the role that administrative costs are playing in the health care reform debate. It illustrates the paucity of adequate data for measuring administrative costs and for distinguishing between the administrative expenses that represent waste and inefficiency in the health care system and the administrative expenses that have the potential to produce long-run cost savings. It also highlights the complexity of predicting the cost savings that would result from adopting a single-payer system given the increases in utilization that would occur and the other differences between the U.S. and Canadian health care systems. As the debate on health care reform evolves,

more information will be needed about the costs and benefits of pluralism versus a single-payer system.

Administrative Costs in the United States

The U.S. spends a significant amount of money on administering the health care system. Although many analysts agree that these costs are excessive, adequate estimates are not available on the sources and total amounts of these administrative costs. This section describes the various administrative costs in the health care system and the trends in these costs over time.

What Are Administrative Costs?

Multiple entities—some Federal, some State, and some private—participate in the financing, reimbursement, and provision of health care services. For example, over 600 companies provide health insurance in the U.S.³⁹ The presence of these multiple entities with their separate administrative structures and practices contributes to high administrative costs for physicians, hospitals, and other providers.

Activities of insurers, providers, and employers are the primary sources of administrative costs. The difficulty in evaluating administrative expense is separating the expenses that are related to the business of delivering health care from the expenses of administration due to the structure of the health care and intermediary systems. The next three sections discuss the sources

³⁹ Henry Aaron, *Serious and Unstable Condition: Health Care Financing in the United States*, (Brookings Institution, 1991).

and estimates of administrative expense for insurers, providers, and employers.

Insurers. Private insurance firms incur administrative costs related to selling and marketing policies, billing and collecting premiums, and evaluating risk. The rapid growth of managed care has also added new layers of administration to the insurance industry in the form of case management, utilization review programs, and provider monitoring systems.⁴⁰

HMOs also incur administrative expenses. Marketing costs are relatively low for many HMOs, except in the small group market where they pay commissions. Large group practice plans which have economies of scale can have administrative overhead of well under 10 percent. Smaller and newer HMOs can have administrative expenditures over 20 percent. The administrative costs tend to be fixed; so the percentage usually drops as the plans grow.⁴¹

It is difficult to identify the extent to which administrative costs contribute to rising health care costs. Marketing costs of competing insurers and the lack of uniform billing requirements have likely raised health care costs. Alternatively, some administrative costs resulting from utilization review and case-management activities may have produced reductions in health care expenditures for certain segments of the health care system. Finally, certain features of the U.S. health care system, such as high rates of malpractice claims, have contributed to higher administrative costs and higher health care expenditures.

⁴⁰ Harry L. Sutton, *Issue Paper on Administrative Costs*, prepared for the Advisory Council on Social Security, May 8, 1991.

⁴¹ *Ibid.*

Estimates of the cost of insurance overhead can be obtained from the Health Care Financing Administration National Health Accounts. In 1990, program administration and the net cost of private health insurance was \$38.7 billion, or about 7 percent of personal health care expenditures and about 13 percent of claims for private insurance.⁴² The net cost of private health insurance, which is the difference between premiums earned and benefits paid, accounts for about three-quarters of this amount. When premium taxes, return on capital, and investment income are excluded from private insurance overhead estimates, administrative expenses as a percentage of benefit payments decline from 13 percent to 7.6 percent. This revised estimate reflects a more accurate estimate of administrative expenses.⁴³

The average insurer incurs administrative costs which are 15-20 percent of the premium. Administrative costs vary by firm size with smaller firms incurring significantly larger administrative costs than larger firms. Insurer administrative charges range from 5 to 8 percent for very large employers, 12 to 18 percent for medium sized employers, and 25 to 40 percent for small employers.⁴⁴ Administrative costs are higher in small groups for three major reasons: (1) the costs of marketing, conforming to regulations, and establishing policies are spread over fewer persons in a small group; (2) the practice of medical underwriting which is typically used by small firms adds administrative costs to establishing a policy; and (3) the risk loading factor is higher for small groups owing to the increased likelihood of covered claims exceeding premium payments.

⁴² Health Care Financing Administration, Office of the Actuary, *Unpublished Data from the Office of National Health Statistics*, 1991.

⁴³ Patricia M. Danzon, *The Hidden Costs of Budget Constrained Health Insurance Systems*, Prepared for the American Enterprise Institute on Health Policy Reform, October 3-4, 1991.

⁴⁴ Hay/Huggins Company, Inc., as presented in Congressional Research Service, *"Cost of Extending Health Insurance Coverage,"* Library of Congress, 1988.

Administrative costs of government programs such as Medicare and Medicaid are considerably lower than for private insurers. Government programs incur administrative costs from such activities as determining eligibility, processing claims, and conforming to regulations. In 1990, government program administration was about 3 percent of the personal health care expenditures that were financed by the government.⁴⁵ The administrative costs of government programs may be understated because they do not include the cost of collecting tax revenue to support health care expenditures and do not include the fair market value of depreciation of government buildings.⁴⁶

Providers. Health care providers also incur substantial administrative costs. These costs are difficult to quantify because the line between administrative and medical tasks is often blurred. Hospitals incur administrative expenses such as billing, marketing, cost accounting, and institutional planning. In addition, a sizable portion of their administrative costs are related to conforming to regulations set up by the Federal Government, State authorities, and health departments. Many hospitals have established their own HMOs or PPOs, thus incurring additional administrative costs.

Hospitals must conform to building codes and inspection requirements, staffing adequacy, reporting of infections, and other aspects of health care delivery. Many of these activities would still have to be performed regardless of the nature of the intermediary system. Hospitals must also provide data to State organizations, HMOs and insurers, and State regulatory authorities. Administrative staff are required to conform with the requirements, of Medicare and Medicaid, utilization review requirements and

⁴⁵ Health Care Financing Administration, Unpublished Data from the Office of National Health Statistics.

⁴⁶ Health Insurance Association of America, *Administrative Cost Statement*, May 1991.

monitoring of both intermediaries and private review systems, as well as directly with employers with large numbers of employees using the facilities. To the extent that hospitals do direct contracting with employers, they may need to deal with patient advocates or utilization reviewers hired by the employers.

Accurate estimates of hospital administrative expenses do not exist. However, one study examining administration and accounting costs for hospitals in California estimated that in 1987, 20.2 percent of hospital costs were incurred for administration.⁴⁷ Critics of this study argue that hospital expenditures in California are not representative of the U.S., since the average length of stay in California hospitals is about 14 percent lower than the national average. Costs per patient day are about 50 percent higher than the U.S. average, and the staff-to-bed ratio in California is about 5.6 percent higher than the U.S. average.⁴⁸

Physicians devote a substantial portion of their gross income to office administration, including the employment of clerical staff and patient billing. Different payers may negotiate or set separate fee levels, complicating the physician's billing system. Part of physicians' administrative overhead is the hiring of nurses and other personnel to make appointments with patients, maintain medical records, and provide assistance in the provision of services. Physicians' practice expenses equaled 48 percent of their gross income in 1987.⁴⁹ Estimates of physician practice expense include rent or mortgage for office space, equipment, nonphysician payroll, and malpractice premiums.

⁴⁷ Steffie Woolhandler and David Himmelstein, "The Deteriorating Administrative Efficiency of the U.S. Health Care System," *The New England Journal of Medicine*, May 2, 1991.

⁴⁸ American Hospital Association, *Hospital Statistics*, 1989.

⁴⁹ American Medical Association, *Socioeconomic Characteristics of Medical Practice*, 1988.

Employers. Employers face administrative costs in addition to the costs incurred in their role as an insurer. They must design plans to meet Federal requirements under ERISA, communicate with employees, and file forms summarizing their benefit programs with the Department of Labor. In addition, major companies have large departments, either personnel, financial, risk management, or medical departments or all of the above.

Some employers are involved in the direct delivery of health care and have utilization reviewers on staff. A portion of these activities involves the delivery of health services, but most activities are solely administrative and concern cost control or assisting employees in finding the proper sources of medical care. It is difficult to determine the precise amount of administrative expenses incurred by employers, but it is likely to be substantial.

Trends in Administrative Costs

Although administrative costs are high in the U.S., an important question is whether they have been rising as a proportion of health care expenditures. This section examines the trends in administrative costs for insurers, hospitals, and physicians to assess whether reducing administrative costs significantly is likely to slow the rise in health care costs.

According to HCFA National Health Account Data, the amount spent on program administration and the net cost of private health insurance as a proportion of personal health care expenditures have increased faster than the increase in personal health care expenditures. Between 1980 and 1990, the U.S. experienced a threefold increase in the amount spent on program administration and the net cost of private health insurance. These data include net changes in insurers reserves and profits, both of which vary according to the underwriting cycle. The periodic swings resulting from the

underwriting cycle limit the extent to which these data can be attributable to administrative costs. During this same period, personal health care expenditures more than doubled. In 1980, administrative costs represented 5.6 percent of personal health care expenditures. By 1990, administrative costs represented 6.6 percent of personal health care expenditures. During the decade, however, administrative costs as a proportion of personal health care expenditures decreased from 6.8 percent in 1985 to 5.5 percent in 1987, but by 1990, they had increased to 6.6 percent of personal health care expenditures (exhibit 1).

Similarly, hospital administrative costs have increased faster than hospital expenditures. In 1983, Himmelstein and Woolhandler found that administration and accounting costs constituted 18.3 percent of hospital costs in California.⁵⁰ By 1987, they estimated that administrative costs represented 20.2 percent of hospital costs in California.

Physician practice costs as a proportion of physician gross income has also increased over time. In 1983, physicians spent 45 percent of their gross income on practice costs; by 1990, this had increased to 48 percent. Most of this difference, however, represents the increased cost of malpractice insurance premiums rather than in administrative costs. Between 1983 and 1987, the proportion of physician practice expense devoted to malpractice premiums almost doubled, while the other categories of practice expense either remained constant or decreased slightly.⁵¹

⁵⁰ David Himmelstein and Steffie Woolhandler, "Cost Without Benefit: Administrative Waste in U.S. Health Care," *The New England Journal of Medicine*, February 13, 1986.

⁵¹ American Medical Association, *Socioeconomic Characteristics of Medical Practice*.

EXHIBIT 1**TRENDS IN ADMINISTRATIVE COSTS**
(In billions)

	1980	1985	1986	1987	1988	1989	1990
National Health Expenditures	\$249.1	\$420.1	\$452.3	\$492.5	\$544.0	\$604.1	\$666.2
Personal Health Care Expenditures	218.3	367.2	398.2	436.7	480.0	530.7	585.3
Program Administration and Net Cost of Private Health Insurance	12.2	25.2	24.7	23.9	27.9	35.3	38.7
Administrative Costs as a Percent of Personnel Health Care Expenditures	5.6%	6.8%	6.2%	5.5%	5.8%	6.6%	6.6%

SOURCE: Health Care Financing Administration, Office of the Actuary: Data from the Office of National Health Statistics.

These data indicate that the cost of administering the health care system is both high and increasing over time. Some of the increase in administrative expenses occurring during the 1980s can be attributed to efforts to contain costs, particularly to contain provider's and patient's incentives to overuse medical care due to the presence of insurance. The increased emphasis on

cost-sharing, utilization review, data collection and reporting requirements, capitation, and complying with Federal and State regulation has added to administrative costs in the U.S. These strategies entail costs to insurers of billing, information systems, monitoring, and contract negotiation and enforcement. This increase in administrative expenses during the 1980's is not surprising, since this was a time of innovation in strategies to control utilization.⁵²

The Role of Administrative Costs in Health Care Reform

Efforts to reduce administrative costs in the U.S. have sparked a debate over the merits of pluralism versus a single-payer system. A number of recent studies have cited that the U.S. could save billions of dollars in administrative costs by adopting a single-payer system modeled after the Canadian health system. In fact, proponents of a single-payer system argue that by adopting the Canadian health system, the U.S. could reduce health care expenditures and provide universal health care coverage. Others argue that the Canadian health system would reduce administrative costs but these savings would be more than offset by increases in utilization from the coverage expansions. This section presents an overview of the Canadian health system and presents the results of three analyses which estimated the potential administrative cost savings resulting from the adoption of a single-payer system.

⁵² Patricia M. Danzon, *The Hidden Costs of Budget Constrained Health Insurance Systems*.

Overview of the Canadian Health System

The Canadian Health System is administered in each province by a public agency that serves as the primary or single payer for all health care services. Health care in Canada is financed primarily from public funds. Each of the country's 10 provincial governments operates health plans that cover hospital and physician services for their residents plus some additional services depending on the province. In addition, private health insurance is available for services that are not covered under the government program.

Health insurance is universal, covering all medically necessary hospital and physician services without cost-sharing requirements. In their role as single payers, the provincial governments are responsible for providing hospitals with fixed operating budgets, negotiating physician fee schedules, and regulating the acquisition of high-technology medical equipment.⁵³

A single-payer system could potentially reduce administrative costs in several ways. In particular, it would eliminate the marketing costs associated with competition among insurance carriers. It also would likely reduce the amount of time and resources that providers spend on paperwork—namely, completing claims forms and determining patient insurance eligibility.

Estimated Cost Savings Under A Single-Payer System

Estimates of the savings that could be realized if the U.S. adopted a single-payer system range from \$66 billion to \$241 billion in 1991. Woolhandler and Himmelstein published the first major study estimating the savings in

⁵³ General Accounting Office, *Canadian Health Insurance: Lessons for the United States*, June 1991.

administrative costs resulting from a single-payer system. They estimated that the U.S. could save from \$69 to \$83 billion if the proportion of health care expenditures devoted to administration equaled the rate in the Canadian health system.⁵⁴ Another study funded by the Robert Wood Johnson Foundation (RWJF) estimates that if the U.S. were to reduce provider reimbursement to Canadian levels, savings could be as great as \$241 billion in 1991.⁵⁵ The General Accounting Office (GAO) estimates that the U.S. could save about \$66 billion by adopting a single-payer system.⁵⁶

The variation in these estimates is largely attributed to differences in the data sources and assumptions about the potential of the U.S. to reduce these costs to the Canadian level. Woolhandler and Himmelstein examined four components of administrative spending in the U.S. and Canada in 1987: insurance overhead, hospital administration, nursing home administration, and physicians' overhead and billing expense.⁵⁷ The RWJ study found a higher amount of administrative savings by assuming that provider reimbursement would be reduced to Canadian levels (a reduction of about 25 percent).

The GAO estimate varies from the Woolhandler and Himmelstein estimate in three important respects: (1) Hospital administrative cost data are from the American Hospital Association instead of from individual hospital cost

⁵⁴ S. Woolhandler and D. Himmelstein, *The Deteriorating Administrative Efficiency of the U.S. Health Care System*.

⁵⁵ Jack A. Meyer, et al., "A National Health Plan for the U.S.," Economic and Social Research Institute (prepared for the Robert Wood Johnson Foundation, Washington, DC, 1991).

⁵⁶ General Accounting Office, *Canadian Health Insurance: Lessons for the United States*.

⁵⁷ Data on U.S. insurance overhead was obtained from the Health Care Financing Administration National Health Accounts. Hospital and nursing home administrative cost data were obtained from cost reports from the California Health Facilities Commission. Physician overhead costs were estimated from data from the American Medical Association.

reports; (2) physician overhead savings were based on a different methodology⁵⁸; and (3) nursing home administrative costs were excluded.

Many analysts believe that the Woolhandler and Himmelstein estimates of administrative cost savings are too high. Most of the criticism has focused on their use of hospital cost report data from California. For example, the expenditures per patient admission and full-time equivalent staff per bed are higher than industry averages. In addition, they argue that it is unrealistic to expect the U.S. to reduce administrative costs to Canadian levels by adopting a single-payer system. The studies do not consider factors other than the insurance system that might result in higher overhead in the U.S. compared with Canada.

A recent study found that estimates of administrative costs in the U.S. are too high.⁵⁹ Some waste and inefficiency may exist, but this is the result of the tax subsidy for insurance and incentives for firms to self-insure. In contrast, a single-payer system entails significant hidden costs that are omitted from official estimates of health care spending. These hidden costs, some of which correspond to the costs that private insurers incur to control utilization and collect premiums, include patient time costs that result from relying on non-price rationing, foregone benefits due to tight budget caps for hospitals and nonoptimal investment in information systems, and deadweight costs of raising tax revenues. Preliminary estimates indicate that these hidden costs may be at least as great as the observable overhead costs in the U.S. system.⁶⁰

⁵⁸ GAO assumed that, under a single payer system, physicians would eliminate one-half of their nonclinical office personnel and that they would reduce the time spend filing claims by 6 minutes per claim. Using these assumptions, the savings per physician was estimated to be \$26,000.

⁵⁹ Patricia M. Danzon, *The Hidden Costs of Budget Constrained Health Insurance Systems*.

⁶⁰ *Ibid.*

It is likely that the cost of delivering care in the U.S. would be higher than in Canada even if the U.S. adopted a single-payer system for several reasons. First, the U.S. has a higher investment in quality assurance and more sophisticated utilization review procedures than in Canada, which would likely continue if the U.S. adopted a single-payer system. Peer review organizations, Federal regulations that will require all laboratories in the U.S. to meet minimum Federal quality standards, and Joint Commission for the Accreditation of Healthcare Organizations standards are examples of the premium that the U.S. places on quality assurance. It is unlikely that these standards would disappear under a single-payer system.

Second, the U.S. health care system is more litigious than the Canadian system, raising administrative costs. The proclivity of Americans to sue providers has resulted in physicians, hospitals, and other health care facilities spending large amounts of money on documentation, risk management, quality assurance, legal fees, and medical liability premiums. It is unlikely that these costs would be eliminated under a single-payer system without a major reform of the legal system.

Third, differences between U.S. and Canadian culture need to be considered. Canada is a far more homogeneous society than the U.S. It is probable that administrative costs will be higher in a more populous society with wide differences in income, languages, and social characteristics, regardless of the insurance mechanism that is used.

Finally, it is questionable whether these administrative cost savings could be sustained over time. Reductions in administrative costs through a single-payer system might decrease the level of health care spending. After the initial reduction in spending, however, it is likely that expenditures would continue to rise at their current rate. This expectation is reasonable assuming

that no controls are placed on technological advances and the wages and salaries of health care professionals—the two factors contributing most to rising health care costs.

Expansions in Coverage Under a Single-Payer System

The major argument being advanced for adopting a single-payer system is that universal coverage could be provided while at the same time producing savings in health care costs. Woolhandler and Himmelstein argue that the U.S. could finance the expansion of coverage to all of the uninsured through the administrative savings that would result from adopting a single-payer system.⁶¹ This argument fails to consider the added costs associated with the increased utilization resulting from the expansions in coverage. As more people become insured, it is reasonable to expect their utilization of health care services to increase. Also, as cost-sharing requirements are eliminated (as in Canada) the currently insured will also consume additional health care services.

When the costs of increased utilization are factored into the analysis of the single-payer system, the U.S. realizes almost no savings. The GAO estimated the utilization response resulting from expansions in coverage under a single-payer system. The GAO estimated a net savings to the U.S. of \$3 billion under a single-payer system⁶². This estimate is likely to be a one-time effect and will have little impact on increases in health care costs over time.

⁶¹ S. Woolhandler and D. Himmelstein, *"The Deteriorating Administrative Efficiency of the U.S. Health Care System."*

⁶² General Accounting Office, *Canadian Health Insurance: Lessons for the United States*.



CONTAINING HEALTH CARE COSTS THROUGH SUPPLY AND PRICE CONTROLS

Health care cost containment is a national policy priority. During the 1980's, health care spending grew at twice the rate of inflation, and by 1990, the country spent \$666 billion on health care, or over 12 percent of the Gross Domestic Product (GDP).⁶³ The rapid escalation of health care spending is not projected to slow; the Health Care Financing Administration (HCFA) estimated that health care spending will reach 15 percent of GDP by the year 2000 and projections by the Congressional Budget Office indicate that 19.5 percent of the Federal budget will be spent on health care by 1996.⁶⁴

Concern about health care spending is likely to dominate the health policy agenda during the 1990's. Increasingly, government, business, providers, and consumers perceive that the benefits generated from these expenditures, in terms of improved health outcomes or patient satisfaction, are not commensurate with the health care resources required to provide the care. Moreover, as health care spending has increased, increasing numbers of Americans have experienced an erosion in their insurance coverage, leaving many millions uninsured or underinsured for needed health services.

Policymakers have renewed interest in developing cost containment initiatives to slow the rise in health care costs. Prior efforts to curb rising health care costs have been sporadic and only marginally successful. Most attempts to

⁶³ Health Care Financing Administration, Office of the Actuary: Data from the Office of National Health Statistics, October 1991.

⁶⁴ Congressional Budget Office, *Rising Health Care Costs: Causes, Implications, and Strategies*, April 1991.

control spending have focused on one payer (e.g., Medicare) or on certain providers (e.g., hospitals), and while they may have controlled spending in certain parts of the health care system, they have been unsuccessful in slowing the rise in total health spending. The failure to control increases in total health spending may be explained by two factors:

- Efforts that achieved some cost savings in one segment of the health care system usually resulted in cost shifting to other segments, producing total aggregate increases in overall health care spending.
- Efforts to control costs were often marked by an absence of "will" to make tough decisions regarding the control of services and technology.

This paper examines the efforts to contain health care costs in the U.S. through supply and price controls, many of which have been established at the Federal and State level over the past 15 years. These cost containment efforts have focused on controlling the supply of facilities and services, the price of services, and total health care expenditures. Specifically, the paper examines the experience with:

- Health Planning and Certificate of Need
- State Rate-Setting Programs
- Medicare Prospective Payment System
- Controls on Expenditures

For each of these cost containment approaches, the paper presents an overview of the approach and the results of research that has been conducted on program effectiveness.

Health Planning and Certificate of Need

The Certificate of Need (CON) program is a regulatory review process that requires certain health care organizations (e.g., hospitals, nursing homes, and certain types of free-standing health care entities) to obtain prior authorization from the State for major capital expenditures, the purchase of some high technology equipment, and the offering of new or expanded services. Established as a mechanism for facilitating compliance with State health plans, CON was intended to moderate increases in health care costs by limiting the expansion of facilities and services and to improve the distribution of health care services. The experience of health planning and CON has been mixed. This section describes the history of health planning and CON and examines the experience of these efforts in containing health care costs.

History of Health Planning and Certificate of Need

Health planning began 50 years ago at the community level as loose coalitions of community leadership, businesses, and health care providers sought to develop a community blueprint for shaping their health services. Such planning bodies—in the form of hospital review and planning councils and community health and welfare councils—operated with local contributions for 20 years before the first government dollar was spent in their support. CON was originally conceived as a tool for States to ensure

compliance with State or regional health plans through control of capital expenditures.

The primary purpose of CON has been to reduce system-wide health care costs by: preventing the duplication of facilities, limiting the proliferation of new technologies, and encouraging cost-conscious renovations of facilities.⁶⁵ In addition to controlling costs, CON has been used to promote other health policy objectives such as: (1) maintaining access to care by promoting and protecting institutions that care for underserved populations; (2) fostering community involvement in the development of health services; and (3) encouraging service/facility development that conforms to State and regional plans.⁶⁶

The first CON programs were developed at the State level. The Federal Government's role in controlling capital expenditures began with the enactment of Section 1122 of the Social Security Amendments of 1972, which authorized State planning agencies to review hospital plans for expansion and modernization. A voluntary program on the part of the States, Section 1122 limited Medicare and Medicaid expenditures by reimbursing only "needed" services or facilities that had obtained prior authorization from the State. Hospitals could, however, secure funds from private payers to cover the costs of capital expenditures.

The Section 1122 process was strengthened with the passage of Public Law 93-641, the National Health Planning and Resource Development Act of 1974. This law created a network of health planning agencies that reviewed

⁶⁵ Lewin and Associates, *Certificate of Need and the Changing Market*, prepared for the Illinois Health Care Cost Containment Council, September 1987.

⁶⁶ Lewin/ICF and The Alpha Center, *Evaluation of the Ohio Certificate of Need Program*, prepared for the Certificate of Need Study Committee and the Ohio Department of Health, June 1991.

local needs and made recommendations to the State regarding approval or denial of CONs. This law imposed stiff penalties on States which failed to enact a CON statute (i.e., the withholding of all Public Health Service Act and related funds). By 1980, all States except Louisiana had enacted CON laws.⁶⁷

In 1986, the Federal Government repealed the Health Planning and Resource Development Act and CON requirements for States to receive Federal funds were dropped. Since the repeal of the Federal law, 38 States have retained their CON programs for some services; however, a number of State programs are currently being reexamined and their future is uncertain.⁶⁸

Experience of CON in Controlling Health Care Costs

CON raises the political and economic costs of institutional investment decisions and creates incentives for institutions to engage in certain activities over others. These incentives are usually designed to promote some agreed-upon policy objectives, such as controlling hospital renovation or open heart surgery. For these incentives to be effective, varied interests must reach consensus on the policy objectives and have confidence in the mechanism chosen to mediate among competing priorities. Evidence suggests that when agreement has been reached on what to control (e.g., nursing homes, neonatal intensive care), CON can be effective in controlling expansion; however, this control has not translated into reductions in health care costs.⁶⁹

⁶⁷ *Ibid.*

⁶⁸ Lewin/ICF and The Alpha Center, *Evaluation of the Ohio Certificate of Need Program.*

⁶⁹ *Ibid.*

By restricting supply in a market where consumers are not price-sensitive, CON is likely to increase the per unit cost of providing the regulated service. Although supply controls reduce utilization for certain services, the net effect of the utilization and price effects are unclear. Without complementary price controls, CON is unlikely to control costs. This section reviews the evidence on the experience of CON in controlling costs in acute care and the long term-care sectors of the health care system and in limiting the proliferation of certain services and technology.

Acute Care. By controlling capital expenditures and the expansion of services and technology, CON was intended to moderate increases in health care costs. Most research has found that CON did not accomplish this goal. It has been shown to be effective in restraining the growth of selected services, particularly in States with stringent programs. This section examines the impact of CON on overall hospital costs and on limiting the diffusion of selected services and technology.

Hospital Costs. Over the past 20 years, a number of national econometric studies have analyzed the effectiveness of CON. The majority of these studies found that CON did not slow increases in acute care costs. Those studies that do show savings report them to be small. One cross-sectional time series study of CON between 1970 and 1975 found that CON did decrease the number of hospital beds, but did not decrease costs.⁷⁰ Another study of about 6,000 hospitals in 50 States from 1974-1978 indicated that CON and Section 1122 were not effective.⁷¹

⁷⁰ F. A. Sloan and B. Steinwald, "Effects of Regulation on Hospital Costs and Input Use," *Journal of Law and Economics*, April 1980.

⁷¹ S. R. Eastaugh, "Chapter 8: Health Regulation to Constrain Capital Expansion," *Medical Economics and Health Finance*, Boston: Auburn House Publishing Company, 1981.

A study by Policy Analysis, Inc., used a more sophisticated methodology which attempted to determine the effect of CON by looking at the strength of different programs.⁷² The study found no statistically significant association between the presence of CON regulation and variation in hospital investment behavior, hospital cost inflation, the distribution of hospital facilities, or the structure of the hospital industry.

One study did show that CON controlled costs, although the extent of control was small. This study examined health service areas in Tennessee from 1980 to 1984. During this period, CON constrained bed growth and reduced both total variable costs and average variable costs.⁷³

These early studies contained a number of methodological weaknesses, including the lack of appropriate control groups, no distinction between different CON programs, and a short study period. A recent evaluation of the Ohio CON program conducted by Lewin/ICF attempted to correct many of these methodological weaknesses. The Lewin/ICF analysis is distinguished from the early studies in three important respects: (1) it uses data from 1980 to 1989 to determine the effect of hospital finances and utilization over time; (2) it groups CON programs into three categories (stringent, moderate, or limited) to adjust for differences among CON programs; and (3) it permits the comparison of the experience of CON to States that have repealed their programs.

⁷² Policy Analysis, Inc., and Urban Systems Research and Engineering, Inc., *Evaluation of the Effects of Certificate of Need Programs*, prepared for the Health Resources and Services Administration, January 1981.

⁷³ J. W. Mayo and D. A. McFarland, "Regulation, Market Structure, and Hospital Costs," *Southern Economic Journal*, January 1989.

Using this methodology, the Lewin/ICF study confirmed earlier results of the impact of CON on hospital costs. CON did not effectively control the increase in acute care hospital spending from 1980 to 1989, either in Ohio or elsewhere. In fact, costs in Ohio and States with stringent regulation increased faster than in other States, controlling for demographic and market factors.⁷⁴ Some of these increases may be explained by longer lengths of stay in these States and an increase in major health care problems such as AIDS.

Selected Services and Technology. Rapid advances in technology and the widespread proliferation of that technology is one of the major reasons health care costs have escalated. Thus, new high cost technology represents an important target for CON programs. Studies of CON have been ambiguous about its impact on controlling the diffusion of services and technology.

One study illustrated the positive effect CON can have on the diffusion of technology. By examining the diffusion of CT scanners in Massachusetts between 1973 and 1981, the study found that CON delayed the purchase of this technology. As a result, the State purchased second generation technology which was somewhat better and less expensive than earlier models.⁷⁵ The decision to defer the purchase of CT scanners involved costs in terms of reduced access to services.

Limiting the diffusion of technology has proven difficult. Due to the strong public demand for the latest in "life-saving technologies," the CON approval process can often become so politicized that it is difficult for regulators to

⁷⁴ Lewin/ICF and Alpha Center, *Evaluation of the Ohio Certificate of Need Program*.

⁷⁵ Ann Lawthers-Higgins, Cynthia Taft, and Jane Hodgman, "The Impact of Certificate of Need on CT Scanning in Massachusetts," *Health Care Management Review*, Summer 1984.

impose limits. Also, there are several administrative difficulties in controlling new technologies, particularly in cases where these services are provided through independent vendors which are not under the jurisdiction of the CON regulatory process (e.g., MRIs in physicians' offices).

The Lewin/ICF study found that CON was effective in restraining the growth of selected services, particularly in those States with stringent CON programs. The CON program in Ohio was also effective in controlling services in areas where consensus was present on the utility of controls.⁷⁶ For example, CON in Ohio was effective in controlling neonatal and pediatric intensive care services, open heart surgery, and organ transplant capability. Only States with stringent CON programs were successful in controlling the proliferation of MRIs.⁷⁷

Long-Term Care. Limiting the supply of long-term care beds through CON is expected to slow the growth of Medicaid expenditures and to encourage appropriate placement in institutional settings. In many States CON has been successful in constraining the supply of nursing home beds and as a result has been credited with containing long-term care costs, particularly the costs associated with Medicaid.⁷⁸ This inference is reasonable since nursing home occupancy rates are about 92 percent nationally and excess demand is present.⁷⁹ Because this figure is so high, a CON program that restricts the construction of new facilities might be expected to decrease the availability of nursing homes, thereby reducing overall costs. While CON appears to have been successful in controlling Medicaid expenditures, private sector

⁷⁶ Lewin/ICF and The Alpha Center, *Evaluation of the Ohio Certificate of Need Program*.

⁷⁷ *Ibid.*

⁷⁸ J. R. Lave, "Cost Containment Policies in Long-Term Care," *Inquiry*, Spring 1985.

⁷⁹ L. C. Dubay, T. D. McBride, and J. Holahan, *Is There a Nursing Home Access Problem? A Review of the Empirical Evidence*, Working Paper, The Urban Institute, 1990.

nursing home costs likely increased in the absence of price controls. Unfortunately, there is no empirical evidence on the effect of CON on per-unit nursing home costs.

Evidence suggests that CON does constrain both total nursing home costs and the supply of nursing home beds.⁸⁰ Analysis of nursing home demand with cross-sectional data from 1969 to 1973 found a considerable amount of excess demand for nursing home care nationally.⁸¹ Given this excess demand, if the supply of nursing homes were permitted to expand enough to satisfy the demand, Medicaid expenditures would increase substantially.

The Lewin/ICF study found that CON has largely been successful in controlling the supply of long-term care beds in Ohio. Constraints placed on institutional long-term care services is likely to have slowed the increase in Medicaid expenditures.⁸²

Other Implications of CON Programs

As noted above, CON was established not only to contain health care costs, but also to maintain access and ensure quality of care. The evidence on the effect of CON with respect to access and quality has been limited. In terms of access, the program has been used in a number of States to protect access to care for inner-city or rural residents, either by preventing the expansion of facilities and/or services in suburban areas or by requiring hospitals to satisfy certain indigent care commitments in exchange for CON approval. For

⁸⁰ Judith Feder and William Scanlon, "The Shortage of Nursing Home Beds," *The Journal of Health Politics, Policy, and Law*, Winter 1980.

⁸¹ William Scanlon, "A Theory of the Nursing Home Market," *Inquiry*, Spring 1980.

⁸² Lewin/ICF and Alpha Center, *Evaluation of the Ohio Certificate of Need Program*.

example, the Ohio CON program placed a high priority on access considerations in the CON review process.⁸³

In the area of long-term care, CON programs have been criticized for reducing access to care by constraining the supply of nursing home beds. The Lewin/ICF study found perceived access barriers to nursing home care in Ohio. Upon closer examination, the study found that the problem was not in obtaining access to any nursing home bed, but rather in securing placement in the "right" homes in certain locations.⁸⁴

CON programs can only have a limited impact on quality of care. They may establish criteria for licensure, accreditation and certification of facilities. In addition, they may constrain the provision of surgical and other services to a limited number of high volume hospitals for services where high volume has been shown to result in higher quality. They have also been criticized for protecting poor quality providers. No studies have been able to assess the effectiveness of CON on quality of care.

State Rate-Setting Programs

A number of States have various forms of rate-setting programs. Four States have mandatory and comprehensive rate-setting systems (Maryland, Massachusetts, New Jersey, and New York). Until recently, all four of these States had waivers from the Medicare Prospective Payment System which permitted them to regulate hospital rates for Medicare patients as well.

⁸³ *Ibid.*

⁸⁴ *Ibid.*

Currently, Maryland is the only State which still has a Medicare waiver, making it the only true "all-payer" system in the nation.

Overview

The primary objective of rate-setting has been to restrain the growth in hospital costs. The theory is that by limiting growth in reimbursement levels, hospitals are given an incentive to become more efficient, resulting in fewer admissions and shorter lengths of stays. States enacted rate-setting programs for a variety of reasons including concern about cost increases in their Medicaid programs, increases in employer contributions for employee benefits, and hospital financial viability.

A major impetus for all-payer rate-setting is to prevent cost-shifting among payers and restore payer equity.⁸⁵ The all-payer system facilitates programs for pooling uncompensated care costs across all hospitals so that no one provider is unfairly disadvantaged for providing a disproportionate share of charity care.

The methods used in setting rates vary by State. In some States, rates are set on either a per diem or a per case basis such as the DRG system used in New Jersey. In other States, only aggregate hospital revenues are regulated, giving the hospital the freedom to vary rates across payers. Rate-setting States use adjustments for case mix, but beyond that there is no adjustment for the intensity of care required for individual patients. This a particular concern for smaller rural hospitals where one or two very expensive patients

⁸⁵ Karen Davis, Gerard Anderson, Diane Rowland, and Earl Steinberg, *Health Care Cost Containment*, Johns Hopkins University Press, 1990.

in a year could result in costs substantially greater than the revenues allowed under the rate-setting system.

Effect of Rate-Setting on Controlling Costs

The effectiveness of rate-setting programs has been the subject of numerous studies. Most studies of rate-setting indicate that mandatory rate review has been successful in slowing the rate of increases in hospital spending. In general, the evidence shows that in rate-setting States the rate of growth in hospital expenses per admission is lower than that observed in unregulated States.⁸⁶ To date, no studies have assessed the impact of rate-setting on total health care costs.

The first study demonstrating the link between State-level hospital rate regulation efforts and reduced levels of cost inflation appeared in 1980.⁸⁷ It showed that during the 1976-1978 period, the cost of a hospital stay in the six States that had implemented rate-setting was increasing at an annual rate that was, on average, three to four percentage points less than the rate in the remaining forty-five nonregulated jurisdictions. A more recent study found that between 1979 and 1984, the rate of change in expenses per adjusted admission were 87 percent less in rate-setting States than in non-regulated States.⁸⁸

Another study analyzed the rate of inflation in hospital costs from 1982 to 1986 in the rate-setting States compared to other States. The authors found

⁸⁶ C.J. Schramm, S.C. Renn, and B. Biles, "New Perspectives on Rate-Setting," *Health Affairs*, Fall 1986.

⁸⁷ B. Biles, C.J. Schramm, and J.G. Atkinson, "Hospital Cost Inflation Under State Rate-Setting Programs," *The New England Journal of Medicine*, 1980.

⁸⁸ C. Schramm, S. Renn, and B. Biles, "New Perspectives on Rate Setting."

that rate-setting States experienced inflation rates that were approximately one-fourth lower than a comparison group of non-rate-setting States. The State with the lowest inflation rate was Maryland, where costs increased less than two-thirds as fast as those of the nation as a whole and were 40 percent lower than those in non-rate-setting States.⁸⁹

The experiences of individual States differ. The most successful rate-setting programs are mandatory and stringently applied. If not stringently applied, rate-setting has not been shown to contain costs. In Washington State, for example, the legislature implemented voluntary rate-setting for hospitals. This program reflected a compromise between those who wanted stringent regulation and others who wanted to rely on market forces to contain costs. Because this voluntary effort was unable to contain costs, it was repealed.⁹⁰

How rate-setting programs are structured also influences their effect. Rate-setting programs that base payment on admissions provide an incentive for hospitals to reduce the number and intensity of services and appear to be more successful than those that base payment on costs per service.⁹¹ One study found that rate-setting increased length of stay in States using the patient day as the payment.⁹²

Most of the research demonstrating that rate-setting is an effective mechanism for containing hospital costs examined the experience before

⁸⁹ J.C. Robinson and H.S. Luft, "Competition, Regulation, and Hospital Costs, 1982-1986," *Journal of the American Medical Association*, 1988: 260:2696-2681.

⁹⁰ Lewin/ICF, *Review of Hospital Cost and Market Trends in Washington and Alternatives to Current Washington State Hospital Commission Regulation*, Prepared for the Washington State Hospital Commission, April 1988.

⁹¹ K. Davis, G. Anderson, D. Rowland, and E. Steinberg, *Health Care Cost Containment*.

⁹² N. L. Worthington and P. A. Piro, "The Effects of Hospital Rate-Setting Programs on Volumes of Hospital Services: A Preliminary Analysis," *Health Care Financing Review*, Spring 1982.

1986. A recent study found that most of the reductions in costs in the 1980s resulted from a decrease in the total number of inpatient days. The reduction in days was greatest in 1984 and 1985 and decreased in each subsequent year; by 1988, there were almost no additional reductions in inpatient days.⁹³ Since the States with rate-setting programs were also the States with the most patient days, it is reasonable to have observed greater cost savings. Additional analysis of the difference in increases in costs between rate-setting and non-rate-setting States should be conducted using data since 1986 to understand better the potential for rate-setting to contain costs. Further research could analyze whether the savings from rate-setting programs represent a one-time effect from the reduction in inpatient days or a longer-term cost containment strategy.

Other Effects of Rate-Setting Programs

Some studies have shown that rate-setting has a negative impact on hospital profitability.⁹⁴ Another study, however, found that rate regulation did not affect hospital profitability. It found that between 1976 and 1984, operating margins of hospitals in regulated States improved and the difference in operating margins between regulated and unregulated States remained the same.⁹⁵

State rate-setting programs may have reduced the disincentive for hospitals to treat the uninsured. The all-payer system facilitates programs for pooling uncompensated care costs across all hospitals so that no one provider is unfairly disadvantaged for providing a disproportionate share of charity care.

⁹³ William B. Schwartz and Daniel N. Mendelson, "Hospital Cost Containment in the 1980s: Hard Lessons Learned and Prospects for the 1990s," *The New England Journal of Medicine*, April 11, 1991.

⁹⁴ S. A. Mitchell, "Issues, Evidence, and the Policymaker's Dilemma," *Health Affairs*, Summer 1982.

⁹⁵ C. Schramm, S. Renn, and B. Biles, "New Perspectives on Rate-Setting."

They have also prevented the deterioration in access to care for Medicaid patients as hospital reimbursement for these patients has declined.

Medicare Prospective Payment System

Facing annual double digit increases in the costs of hospital care, in 1983 the Federal Government enacted the Medicare Prospective Payment System (PPS). PPS was intended to achieve five goals: (1) to establish Medicare as a prudent buyer of services, (2) to reduce the rate of increase in Medicare expenditures, (3) to ensure predictability in Medicare payments, (4) to reduce the burden on hospitals, and (5) to encourage hospitals to operate more efficiently.⁹⁶ While originally conceived as a budget-neutral device aimed at improving fairness and rewarding efficiency, it quickly became a cost containment device.

PPS set hospital rates prospectively through a system of diagnostically related groups (DRGs). DRGs offer hospitals a fixed payment, related to expected costs of treatment for specific diagnoses, for each hospital admission. The fixed payment creates incentives for hospitals to operate more efficiently and to reduce length of stay.

Ample evidence has shown that such controls have worked. During the first 5 years of PPS, average length of stay for Medicare enrollees declined 10 percent.⁹⁷ Over the same period, hospital admissions of Medicare enrollees declined by 12 percent, partly as a result of the Medicare hospital

⁹⁶ R. S. Schweiker, *Report to Congress on Hospital Prospective Payment for Medicare*, 1982.

⁹⁷ Congressional Budget Office, *Rising Health Care Costs: Causes, Implications, and Strategies*, April 1991.

utilization review process.⁹⁸ Between 1976 and 1982, real Medicare costs rose at about twice the rate of the private sector; between 1982 and 1988 the situation was reversed. Medicare expenditures fell steadily over this period so that by 1987 and 1988 the increase averaged only 0.6 percent per year.⁹⁹

Recent evidence suggests that the effect of PPS in slowing the rate of increase in Medicare expenditures may have been a one-time savings resulting from the reduction in patient days.¹⁰⁰ Average patient days have declined steadily since the implementation of PPS and have remained roughly constant since 1988. The implication of this finding is that once all the savings due to reductions in the number of inappropriate inpatient days have been realized, real hospital costs are likely to increase unless other cost containment measures are implemented.¹⁰¹

While PPS was successful in slowing the rise in Medicare inpatient costs, it did not have an impact on total health care costs and has resulted in increases in costs for Medicare outpatient services (exhibit 1). As providers adjusted to PPS, more services were moved out of the hospital and into ambulatory settings, resulting in an increase in spending for physician and other outpatient services. Estimates place the net effect of PPS on physician spending at an increase of between 14 and 18 percent.¹⁰²

⁹⁸ *Ibid.* 12

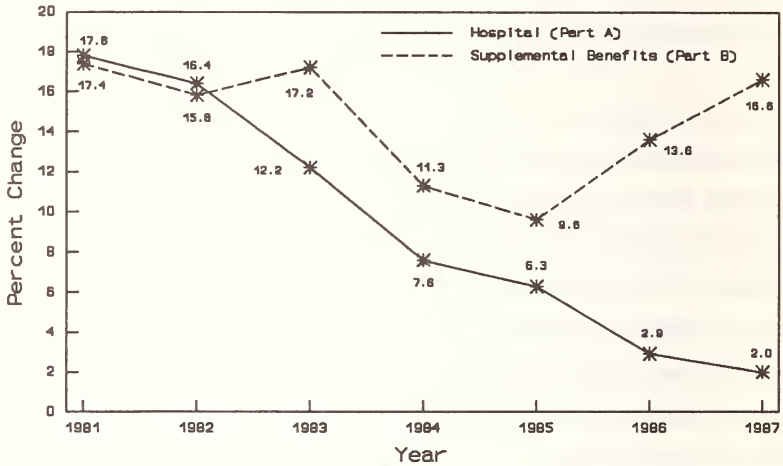
⁹⁹ W. Schwartz and D. Mendelson, "Hospital Cost Containment in the 1980s: Hard Lessons Learned and Prospects for the 1990s.

¹⁰⁰ *Ibid.*

¹⁰¹ *Ibid.*

¹⁰² Congressional Budget Office, *Rising Health Care Costs: Causes, Implications, and Strategies.*

EXHIBIT 1
PERCENT INCREASE IN MEDICARE BENEFIT
PAYMENTS PER ENROLLEE



SOURCE: Health Care Financing Administration, OHS.

Control on Expenditures

Another mechanism for controlling health care costs is to set a prospective limit on total spending. These limits may take two forms: (1) global budgets whereby the government sets an operating budget for different providers (e.g., hospitals) and (2) expenditure targets whereby the government sets a target for aggregate spending for health services.

Other countries have successfully applied limits on health care expenditures to control spending. Global budget caps were proposed for the U.S. in the 1970s during the Carter Administration but they were never implemented. The only domestic experience with expenditure limits was in Massachusetts from 1983 through 1985. Under Chapter 372 of the General Laws, the State

implemented, under a waiver from Medicare, a law which capped the amount of revenue each hospital could collect annually. The rate was determined by the Massachusetts Rate Setting Commission. If a hospital exceeded its revenue limit, it was required to reduce its future charges. The impact of this program on controlling costs has not been examined.

The Omnibus Budget Reconciliation Act of 1989, which enacted Medicare Physician Payment Reform, established expenditure targets for the rate of increase in physician spending under Medicare beginning in 1990. If the rate of increase in spending exceeds the target, physicians' fees under the Medicare program will be lower in subsequent years (beginning in 1992). Preliminary data for the first half of 1990 suggest that the rate of growth was 12.4 percent, substantially above the 9.1 percent target for 1990.¹⁰³ As with PPS, expenditure targets for physicians under Medicare may be successful in slowing the rate of Medicare expenditures, but it is unlikely to influence the rise in spending for other payers.

The U.S. is beginning to explore the experience of other countries with global budgets and expenditure targets. Canada and many European nations have established different forms of cost controls which are detailed in the final paper in this report. In establishing expenditures limits, our international counterparts have confronted the delicate balance of controlling costs while maintaining access to care and ensuring quality. In achieving this balance, these systems have made tradeoffs with respect to cost and access. Understanding these other systems and their implicit tradeoffs will provide lessons to U.S. policy makers about possible strategies for controlling costs.

¹⁰³ *Ibid.*



MANAGED CARE AS A COST-CONTAINMENT VEHICLE

Overview

Managed care is the focus of much attention in the current national debate over health care cost containment. Managed care is seen as a vehicle both for limiting prices paid to providers and for restraining excessive utilization of health services. For many participants in the debate, it holds appeal as a model for competitive, or market-based, reform as either a complement or an alternative to regulatory approaches.

The idea of managed care as a solution to the nation's health cost problems is not new. Twenty years ago the Nixon administration promoted the development of prepaid health care plans, building upon the health maintenance organization (HMO) concept espoused by Dr. Paul Ellwood.¹⁰⁴ What is new is that managed care now takes a wide variety of forms and constitutes a large, mature industry which touches a significant proportion of the privately and publicly insured population.

This paper describes the fundamental elements of managed care as a cost containment vehicle. It begins by defining the concept of managed care and providing an overview of the principal managed care strategies employed by purchasers of health care. It then follows with a more in-depth description and analysis of the specific managed care programs which comprise each primary strategy.

¹⁰⁴ R.F. Atlas and M. McNally, "The Health Maintenance Organization Act," *Health Care Handbook* (Warren, Gorham & Lamont, Boston, 1991).

Definition of Managed Care

"Managed care" is a relatively new term, having come into general use in the early 1980s. Its first application was in reference to prepaid health plans—or HMOs—which, up until that time, had been most often described as "alternative delivery systems." Owing to the emergence of new forms of health cost management systems that differed from HMOs, people in the industry had sought a new label that was not quite so narrow. "Managed care" was the one that took hold.

There is no formally accepted definition of managed care such as one might find in statutory language. Its meaning fluctuates depending upon the context in which it is used and the backgrounds of the people using it. The Health Insurance Association of America, for instance, defines managed care as:

"Those systems that integrate the financing and delivery of appropriate health care services to covered individuals by means of the following basic elements:

- arrangements with selected providers to furnish a comprehensive set of health services to members;
- explicit criteria for the selection of health care providers;
- formal programs for ongoing quality assurance and utilization review; and

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- significant financial incentives for members to use providers and procedures associated with the plan."¹⁰⁵

Other concerned parties define managed care more broadly, including, for example, utilization review mechanisms that do not entail the use of selected providers. A working definition of managed care might best be stated as follows:

Managed care refers to interventions by, or on behalf of a payer, to control the cost and volume of health services in order to maximize the value of health benefits.

As this definition implies, managed care is, first and foremost, a payer-based concept. It derives from the concerns that sponsors of health benefits programs—employers, insurers and government agencies—have about the cost and quality of the health services they purchase for their respective beneficiaries. Health care providers such as doctors and hospitals may participate in managed care, but it is payers who furnish the impetus for that involvement. In fact, much of the practice of managed care hinges upon payers' notion that health care providers, if left to their own devices, would behave in such a way as to force health costs to grow at unacceptable rates.

The definition also reveals that managed care focuses on both the cost and the volume of health services. Managed care can address cost in several ways:

- by channeling the flow of patients toward lower priced health care providers, whether discounted or otherwise;

¹⁰⁵ Health Insurance Association of America, direct communication with authors, October 1991.

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- by seeking to have care delivered in the least costly or least intensive setting when a number of alternatives exist (e.g., substituting ambulatory or home care for acute inpatient services);
 - by reducing financial risk through prospective determination of prices such as on a per service, per case or per capita basis, or through outright ownership of health facilities and employment of health professionals; and
 - by managing the reimbursement process in a way that assures only claims for legitimately covered services are paid.

Managed care can target the volume, or **utilization**, of health services by beneficiaries in at least four ways:

- by interceding, either through beneficiary or provider incentives or through direct intervention, to eliminate, or at least to reduce, the incidence of unnecessary or duplicative services;
- by steering patients to providers who are shown to consume fewer resources in achieving given outcomes;
- by emphasizing the use of techniques and technologies that require less expansive treatment (e.g., non-invasive imaging as a substitute for exploratory surgery that requires a hospital stay); and
- by stressing wellness, prevention and early medical intervention so as to lessen the amount of costly palliative care needed by the beneficiary population.

The final element of the definition concerns maximization of the value of health benefits. Value here refers to obtaining the best possible health outcome for the resources available. This concept is an important facet of managed care because, without consideration of value, it would be easy to control costs by diminishing the quality of care. It would also be fairly simple to control the plan sponsor's costs by shifting more of the financial burden to the beneficiaries. Managed care practices, when properly applied, are those which seek to contain costs without reducing quality or transferring costs unfairly to beneficiaries.

The Potential for Cost Containment

As noted in a recent Congressional Budget Office (CBO) report, the most appreciable impact of managed care has been to control utilization.¹⁰⁶ The CBO report points out, though, that the growth of managed care has not produced a noticeable drop in overall health spending. Reasons suggested by CBO include:

- Not all managed care arrangements produce the same effect. Loosely organized managed care systems yield little, if any, savings. Much of the recent growth in managed care has been in these looser forms.
- Managed care entails added administrative expense which may offset health cost savings. In some instances, particularly smaller groups where scale economies are hard to achieve, there may be no net savings at all.

¹⁰⁶ Congressional Budget Office, *Rising Health Care Costs: Causes, Implications and Strategies*, April 1991, pp. 36-40.

It has also been argued that managed care produces a one-time-only savings when first implemented and that subsequent expenditure growth rates in the managed care sector track the same upward slope as costs in the unmanaged fee-for-service sector.¹⁰⁷ Some recent trends would seem to support opponents of this argument, however, at least with respect to the HMO segment of the managed care industry. A survey of nearly 2,000 employers conducted in early 1991 by the benefits consulting firm A. Foster Higgins & Co. found not only that HMO premiums per employee were lower than those paid for indemnity coverage, but also that the rate of increase in HMO premiums was substantially lower, as shown below.¹⁰⁸

Comparison of Indemnity and HMO Premium Rates

Year	Annual Premium Per Employee		Premium Growth Over Prior Year		HMO Premium as percent of Indemnity
	Indemnity	HMO	Indemnity	HMO	
1988	\$2,160	\$1,991	-	-	92.2%
1989	\$2,600	\$2,319	20.4%	16.5%	89.2%
1990	\$3,161	\$2,683	21.6%	15.7%	84.9%

Source: A. Foster Higgins & Co.

¹⁰⁷ Henry J. Aaron, *Serious and Unstable Condition: Financing America's Health Care*, The Brookings Institution, 1991, p.117.

¹⁰⁸ J. Geisel, "HMO Savings Confirmed," *Business Insurance*, August 12, 1991, p.1.

The remainder of this paper explains the components of managed care arrangements, describes the many different forms that managed care takes on in practice, and discusses the evidence extant concerning the effectiveness of managed care.

Managed Care Practices

The specific components of managed care may be grouped into three categories. The first category consists of **organized delivery systems**. Organized delivery systems are networks composed of physicians, hospitals and other health care providers who band together to serve the comprehensive health care needs of defined populations and who agree to follow certain guidelines pertaining to the control of health care cost, utilization and quality.

The second category is **utilization management**. Utilization management refers to the oversight of health services with the intent of assuring both that they are necessary and that they are performed in the most appropriate setting. It may involve both review activities and direct, active intervention by the plan sponsor.

The third category is comprised of **financial controls**, which involve the application of payment limits as well as financial inducements to motivate both providers and beneficiaries to behave cost-effectively. Financial controls also include administrative measures designed to assure accurate payment.

We describe the specific practices that fall into each category below. Note, however, that many managed care systems, such as HMOs, employ

approaches combining two or all three types of action. Such multi-pronged strategies may be needed to ensure that cost containment efforts are optimally effective. Conversely, other managed care approaches, such as precertification of hospital admissions or claims processing interventions, can be successfully implemented in isolation from other techniques.

Organized Delivery Systems

An organized delivery system is a formal combination of health care resources, the purpose of which is to render comprehensive health services in a rational, coordinated manner. Organized delivery systems are usually legal entities that either own facilities and employ medical professionals or use contractual and other arrangements to construct networks of otherwise independent, community-based providers. Sponsors of organized delivery systems may be insurers, hospitals, physician groups, employers, third party administrators, community groups or investors, each with its own goals for the program.

The main features of fully developed organized delivery systems are:

- **Comprehensiveness.** An effective organized delivery system is capable of delivering all but the most unusual and infrequent health care services, from routine physician care to tertiary hospital services. Referrals to outside providers seldom occur.
- **Service availability and accessibility.** Sufficient capacity exists so that patients can avail themselves of needed services without undue delay. Participating physicians' offices and hospitals are dispersed widely throughout the designated service area to assure convenient access by patients.

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- **Provider selectivity.** Physicians, hospitals and other providers are chosen to participate in the system based upon evidence that they deliver quality, cost-effective care. Moreover, the fewest of each type of provider needed to serve the covered population are included so as to promote efficiency and to furnish adequate patient volume to each provider.
 - **Provider acceptance of controls.** In entering the delivery system, doctors and hospitals agree to follow rules and procedures designed to contain costs and offer protection to patients. They accept payment limits, financial risk for high usage (sometimes), utilization restraints and quality monitoring processes. Providers also agree not to bill patients, except for allowable copayments.
 - **Restricted patient choice.** Within the confines of the delivery system's provider network, patients are afforded limited choice in obtaining medical care. In one type of system, for example, they may be able only to select a personal physician from the network's roster of participating primary care physicians. Or, in another type of system, they may seek care entirely outside the designated network, but at the expense of significantly increased cost-sharing.
 - **Information management.** Central to successful operation of organized delivery systems is the acquisition and analysis of complete and timely data on provider activities (e.g., physician practice patterns), and patient utilization and the associated costs. Managers of organized delivery systems use the information to manage resources, to set standards for appropriate utilization of health care services, and to institute early corrective action when problems are identified.

The three predominant forms of organization delivery systems are: the health maintenance organization—the oldest and most familiar form; the preferred provider organization; and the most recent innovation, and the point-of-service plan or open-ended HMO. The remainder of this section provides an overview of each of these approaches, a discussion of their respective abilities to control costs based on purchaser experience, and a brief description of recent trends arising from each strategy.

Health Maintenance Organizations

Overview. Health maintenance organizations (HMOs) are seen by many as the model for organized delivery systems because they not only deliver care but also accept full responsibility for the costs incurred. The generic HMO is a system where the enrollee, or a sponsor such as an employer, pays a fixed annual premium to an organization of providers for comprehensive care. From the beneficiaries' point of view, compared to the traditional fee-for-service insurance system, their out-of-pocket liability is reduced since deductibles and copayments are either non-existent or very limited (e.g., \$5 for a physician office visit). In exchange for the reduced financial responsibilities, however, the HMO member's choice of providers is strictly limited to the HMO's network of physicians, hospitals and other ancillary providers. Further, only under exceptional circumstances is care received outside the network covered.

There are four primary HMO models: staff, group, network and independent practice association (IPA). Staff model HMOs employ physicians directly, pay them salaries, and furnish them with clinic facilities and support staff. Group Health Association in Washington, DC is one of the oldest pure staff model HMOs in the United States. Group model HMOs contract with physician group practices to provide services. The Kaiser Permanente

Medical Care Program, the nation's largest HMO with more than 6.5 million members, is a group model. The physicians are legally separate from the HMO entity (Kaiser) in their own group (Permanente Medical Group), even though that group exclusively serves Kaiser members. Network model HMOs contract for medical services from two or more independent group practices. HealthNet in California is a very large network model HMO. IPA model HMOs, which were initially developed by privately practicing physicians in response to competition from group and staff model HMOs, are organized prepaid health care systems that contract with physicians in independent practice to provide health services. US Healthcare in Pennsylvania is one of the nation's largest operators of IPA HMOs. Some HMOs now combine features of two or more of the basic models. For example, Harvard Community Health Plan in Massachusetts has both staff and IPA components, the result of a merger with another HMO.

HMOs as a Cost Containment Vehicle. The major technique HMOs use to reduce the cost of care is to substitute ambulatory treatment for inpatient care.¹⁰⁹ Hospital admission rates 10 to 40 percent less than in fee-for-service groups have been observed.¹¹⁰

The number of visits per enrollee is affected by both the incentives to the physicians to provide visits, the per-visit charge to the enrollee, and natural propensity of enrollees to consume medical care. In an important study that randomly assigned individuals to an HMO or to a fee-for-service plan, both with comparable benefits and cost-sharing, Manning et al. found that (1) the

¹⁰⁹ E.W. Bates and B.S. Brown, "A Theoretical Analysis and Initial Findings From The National Medicare Competition Evaluation," *Medical Care*, Vol.26 (May 1988), pp. 488-498.

¹¹⁰ W.G. Manning and A. Leibowitz, et. al., "A Controlled Trial Of The Effect Of A Prepaid Group Practice On Use Of Services," *The New England Journal of Medicine*, Vol. 310 (June 7, 1984), pp. 1505-10.

rate of hospitalization in the HMO group was 40 percent less and (2) the rates of ambulatory visits were similar. Overall, they estimated cost-savings from the HMO practice style perhaps as high as 25 percent.¹¹¹

Other studies have investigated how HMOs achieve these lower rates of hospitalization. An HMO population studied by Siu was shown to have a lower rate of discretionary surgery than comparable patients in a fee-for-service plan.¹¹² The rate of non-discretionary surgery was the same in both plans. However, the rates for both discretionary and non-discretionary medical admissions were lower in the HMO than in the fee-for-service plan. They found no discernable health effects from the lower medical admission rates.

Although many consider the HMO as the ideal mechanism for containing costs, purchasers today disagree about its ability to achieve this goal. A survey conducted by the periodical *Business Insurance* reported that only 29 percent of the employers offering HMOs believed that HMOs were successful in controlling health care costs.¹¹³ A separate survey conducted by the benefits consulting firm A. Foster Higgins & Co. yielded similarly disappointing news—only 38 percent of employers indicated that HMOs were able to hold down health care costs.¹¹⁴

A possible explanation for the contradiction between HMOs' lower premiums and lower trend rates and the negative attitudes just described is the oft-stated argument that HMOs "skim the cream." One of the most commonly held

¹¹¹ *Ibid.*

¹¹² Albert L. Siu, et al. "Use of the Hospital in a Randomized Trial of Prepaid Care," *Journal of the American Medical Association*, March 4, 1988, pp. 1343-46.

¹¹³ *Business Insurance*, December 1990.

¹¹⁴ Philip Albinus, "Trust: HMOs are Gaining it Slowly," *Health Week*, August 26, 1991.

beliefs of employers is that HMOs appear economical only because they benefit from favorable selection—the youngest, healthiest employees enroll in HMOs while older, sicker workers keep indemnity coverage. This view is exemplified by a recent request for proposals issued by the Massachusetts Group Insurance Commission which states, in part, "The Commission . . . believes that the [State's indemnity plan for employees and retirees] has been adversely selected against by the HMOs. In fact, the costs of selection may far outweigh whatever savings have been generated by the increased use of managed care on the indemnity side."¹¹⁵ Empirical studies tend to support employers' suspicions about HMO selection.¹¹⁶

HMO Trends. Nationally, enrollment in HMOs continues to rise, from 26.5 million in 1986 to more than 36.5 million in 1990, claiming 14.6 percent of the US population as members,¹¹⁷ although the pace of growth has slowed in the past few years. Enrollment tends to vary tremendously by HMO model type and by geographic location. For example, average HMO penetration in the Pacific States reached 29.8 percent in 1990, by far the most significant in the country, while average enrollment in the South Central states was a modest 5.8 percent in the same year.¹¹⁸ In comparing enrollment by model type, it is interesting to note that IPA models now account for 62 percent of all plans, and boast 43 percent of all HMO members.¹¹⁹

¹¹⁵ Commonwealth of Massachusetts Group Insurance Commission, "Request for Proposals Relative to the Provision of Consulting Services for the Purpose of Evaluating the Commonwealth's Employee-Retiree Health Benefits Program," August 30, 1991.

¹¹⁶ J.L. Buchanan and S. Cretin, "Risk Selection of Families Electing HMO Membership," *Medical Care*, 1986, 24(1):39-51. G.R. Wilensky and L.F. Rossiter, "Patient Self-Selection in HMOs," *Health Affairs*, 1986, 5(1): 66-80.

¹¹⁷ Group Health Association of America, 1991 *National Directory of HMOs*.

¹¹⁸ *Ibid.*

¹¹⁹ *Ibid.*

Staff model HMOs, while representing the smallest portion of the HMO industry in terms of both membership and total plans (11 percent and 13 percent, respectively) have been flourishing, experiencing more than a 11 percent increase in membership from 1988 to 1991.¹²⁰

The most remarkable trend in the HMO industry has been the dramatic change in the number of operational HMOs over the past decade, as shown below.¹²¹

	<u>1980</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>
Number of HMOs:	235	391	592	659	640	587	553
Enrollment (millions):	9.1	22.6	26.5	31.0	33.7	34.1	36.5

The recent decline in the number of HMOs has been the result of numerous mergers and acquisitions. Much of the acquiring has been done by large insurers seeking to convert to managed care and to broaden geographic coverage. There have also been very few, if any, new HMO start-ups since the mid-1980s. Another trend affecting this industry reflects the decision by many employers to reduce their HMO offerings in an effort to stem anti-selection as well as to shrink the administrative costs of managing numerous managed care programs and to gain some leverage with the plans they retain. Lastly, HMOs now face significant competition from PPOs and point-of-service plans.

¹²⁰ *Ibid.*

¹²¹ "Managed Care: A Decade in Review 1980 to 1990," *The InterStudy Edge*.

Preferred Provider Organizations

Overview. A preferred provider organization (PPO) is a health care delivery mechanism whereby a third party payer contracts with a select group of medical care providers who furnish services at lower than usual fees in return for the expectation of growth in the volume of patients. Unlike the HMO, which assumes full risk under a prepaid premium, the typical PPO does not face substantial risk for health care costs experienced by beneficiaries. Also unlike the HMO, where the beneficiary is formally enrolled in the plan, PPO users typically are not required to enroll and may decide at any point to utilize either participating or non-participating providers. As a result, actual participation in PPOs is very difficult to track and is typically measured in terms of "eligible users." Recent figures indicate that as many as 69 million Americans may be eligible to use the 685 operational PPOs.¹²²

To encourage beneficiary use of participating providers, PPOs employ financial incentives such as significantly greater cost-sharing when services are obtained outside the PPO provider network. As an example, an individual might be responsible for a 10 percent copayment if care is rendered by a network provider versus a 30 percent copayment if care is received outside the PPO's provider network. Such copay differentials are typically limited by state insurance regulators and rarely exceed 20 or 30 percent. Depending upon the breadth of a given PPO provider network and the strength of the incentives for beneficiaries to use the network, utilization of in-plan providers may range from 50 percent to 85 percent.

PPOs as a Cost Containment Vehicle. For the most part, health care purchasers view PPOs as effective mechanisms for controlling costs. In a

¹²² Marion Merrell Dow *Managed Care Digest*, PPO Edition, 1990.

poll conducted by *Business Insurance*, 75 percent of employers interviewed indicated that their PPOs had successfully controlled health care costs.¹²³ The benefits consulting firm, Hewitt Associates, reported equally favorable news in their survey with 71 percent of the employers interviewed indicating that use of a PPO arrangement resulted in lower medical plan costs.¹²⁴

Other than these surveys of employers, there is little empirical evidence concerning the cost-effectiveness of PPOs. Some of the data that exist reveal that costs of PPO coverage are comparable to costs in conventional indemnity plans.¹²⁵ On the other hand, different surveys show that PPO plan costs may be as much as 8 percent below indemnity plan costs.¹²⁶

One of the reasons that employers seem more enamored of PPOs than of HMOs is the absence of fixed enrollment and "lock-ins" that prohibit the employee from seeking care outside the selected provider network. The flexibility afforded by PPOs makes them more palatable to the broad cross-section of workers.

Finally, PPOs may cost some employers less per participating employee than HMOs by virtue of their less comprehensive benefit coverage and higher employee cost-sharing. Rarely are comparisons made on plans with equivalent benefits and cost-sharing.

Trends. There have been very few new PPO start-ups in recent years and the largest PPOs have consistently experienced the most substantial gains in

¹²³ *Business Insurance*, December 1990.

¹²⁴ Hewitt Associates, *Managing Health Care Costs*, 1989.

¹²⁵ Cynthia Sullivan and Thomas Rice, "The Health Insurance Picture in 1990," *Health Affairs*, Summer 1991, pp. 104-115.

¹²⁶ J. Geisel, "Employers Cite PPO Effectiveness," *Business Insurance*, August 12, 1991, p.79.

participation. Reflecting trends seen elsewhere in the managed care industry, the percentage of insurer-sponsored PPOs has grown while the percentage of provider-sponsored PPOs has been on the decline.¹²⁷ The drop-off in the market share of provider-sponsored PPOs is the result of much purchaser skepticism about the idea of "the fox guarding the chicken coop."

A separate trend has been a dramatic increase in the number of specialty PPOs such as those focusing exclusively on providing mental health/substance abuse, chiropractic and podiatric services. An additional concept that is gaining greater recognition for its ability to control the costs of very high cost procedures is that of "centers of excellence." Centers of excellence are essentially highly selective networks of providers assembled by payers to provide high cost, specialized services at a pre-negotiated fee. The Prudential Insurance Co. claims to have pioneered this concept with its "Institutes of Quality" program. Prudential now has a national network for organ transplants and allogenic bone marrow transplants and is developing a network for coronary artery bypass graft surgery and angioplasty. Organizers of these networks typically select only providers that perform a high volume of the target procedure and that can document highly successful patient outcomes. Cost per procedure is also an important selection factor.

Whereas State regulation of HMOs is virtually universal and, to a large degree uniform, State regulation of PPOs is both emerging and variable. The most common rules restrict insurers' ability to limit the size or scope of PPO provider networks. Some States also constrain the reimbursement differential that can be imposed on users of non-participating providers. According to the Health Insurance Association of America, during 1990 and

¹²⁷ Marion Merrell Dow *Managed Care Digest*, PPO Edition 1990.

1991, legislation was introduced in 35 States that in some way restricted the growth and operation of preferred provider networks.¹²⁸

Point-of-Service (POS) Plans

Overview. Point-of-service (POS) plans, referred to by many as the "second generation of managed care," are essentially a hybrid of a PPO and an HMO. POS or "open-ended" products are unique in that while individuals are enrolled in the plan (as in an HMO), they may self-refer to providers outside the network for care (as in a PPO). However, obtaining care outside the network usually entails substantial penalties in the form of greatly increased cost-sharing. For example, in-network care may entail no deductible and a \$5 copayment for physician office visits, while out-of-network care requires a \$250 deductible and 20 percent coinsurance. Preventive care usually is covered only in-network. Clearly, the underlying goal of these financial incentives is to encourage enrollees to use network providers who have agreed to adhere to utilization controls.

According to recent figures, enrollment in POS plans has made this the fastest growing segment of the managed care industry. In its latest employer survey, the Health Insurance Association of America found that fully five percent of persons covered by group insurance in 1990 were enrolled in POS plans, whereas that category did not even exist in the prior year.¹²⁹

POS Plans as a Cost Containment Vehicle. POS plans tend to entail higher administrative costs for employers than either HMOs or PPOs but health benefits managers are finding the savings generated justify the added costs.

¹²⁸ HIAA, direct communication with the authors, October 1991.

¹²⁹ Sullivan and Rice, "The Health Insurance Picture in 1990," *op. cit.*

An analysis conducted by Metropolitan Life Insurance Company of six employer groups with POS plans showed a 15 percent decrease in aggregate claims costs from 1988 to 1989.¹³⁰ Allied-Signal, Inc., a large employer often credited with spearheading the POS movement, reported that after 18 months of experience, its cost per participating employee was \$2,542 per year compared with an estimated \$3,293 per year had the employees remained under the old system.¹³¹ The company attributed savings to a substantial drop in hospital utilization (271 days per 1,000 enrollees in the first year versus 562 days per 1,000 employees and dependents covered by the old indemnity plan). Ambulatory service usage rose, though, with enrollees using 4.4 physician visits each and non-enrollees using two visits apiece. These findings have not been validated independently, however, and the long-term effectiveness of POS plans has yet to be tested.

Trends. As further proof of the growing popularity of POS plans, a 1990 Group Health Association of America survey reported that 43 percent of HMOs indicated they would be offering a POS product by 1991. By contrast, only 16.4 percent of HMOs surveyed said they offered POS HMO products in 1989.

Although experts seem to agree that POS plans are not a panacea for rising health care costs and in fact may only be a "way station" between HMOs and the next strategy,¹³² POS plans are predicted to play an increasingly dominant role in the delivery of health care.

¹³⁰ Joanne Wojcik, "Containing Health Costs: POS Plans Gain Support Despite Administrative Load," *Business Insurance*, February 18, 1991.

¹³¹ Maria Traska, "Allied-Signal's Bold Move: Is It Working?" *Business & Health*, April 1990.

¹³² "We're Not There Yet: POS Plans Important Step, Not End of Line," *Managed Care Outlook*, May 10, 1991.

Organized delivery systems almost always employ utilization management and financial control practices to contain costs to the greatest possible extent. The following two sections describe these practices, many of which may also be applied by health plan sponsors in the absence of formal organized delivery systems.

Utilization Management

The term "utilization management" represents an evolution of the process originally known as "utilization review." Utilization review first saw wide application in the early 1970s as a response to the rapid escalation of Medicare expenditures. Utilization review is essentially a monitoring process, while utilization management connotes more of an active, interventionist mode of doing business. Thus defined, one can consider utilization review to be one form of utilization management.

As noted in the introduction to this paper, one goal of any utilization management effort is to constrain health care spending by preventing the occurrence of unnecessary procedures. Believing significant savings are obtainable in this fashion, payers cite such research as the Rand Corp. study of selected procedures performed on Medicare beneficiaries that found that 17 percent of coronary angiographies, 32 percent of carotid endarterectomies, and 17 percent of upper gastrointestinal tract endoscopies were inappropriate.¹³³ Another important purpose served by utilization management is to ensure that, when services are delivered, they are done using the most cost-effective modality available.

¹³³ Mark Chassin, et. al., "Does Inappropriate Use Explain Geographic Variations in the Use of Health Care Services?" *Journal of the American Medical Association*, November 13, 1987, pp.1-5.

Utilization Management Techniques

The most common utilization management application, performed by most HMOs and PPOs but also now used in conventional indemnity plans covering nearly 60 percent of the population insured under employer group plans,¹³⁴ consists of **prior authorization of non-emergency hospital admissions**. The typical process is as follows. Before a patient may be admitted to a hospital for elective care, either the patient or the patient's physician must contact a health plan utilization management (UM) coordinator. The UM coordinator queries the caller about the circumstances of the admission, then evaluates this information according to clinical criteria and standards used by the plan sponsor. If the guidelines for admission are met, as is most often the case, then the UM coordinator grants approval. If the case is questionable or fails to meet the standards, then it is typically referred to a physician reviewer for disposition. The physician reviewer may grant approval based on more detailed information received, but in at least some instances the admission is denied for payment.

Pre-admission review programs take many forms. Some are all-encompassing, screening 100 percent of prospective admissions, while others focus only on diagnoses or procedures considered likely to be deemed inappropriate—coronary artery bypasses and hysterectomies, for example. Some programs judge only the necessity of the admission, while others include mechanisms to assign approved lengths of stay. And some programs specialize in certain types of care—mental health and substance abuse treatment being the most notable.

¹³⁴ Sullivan and Rice, "The Health Insurance Picture in 1990," *op. cit.*

Other prospective or concurrent utilization management practices that are often employed in addition to pre-admission review are:

- **Pre-screening of outpatient services.** Many elective procedures done on an ambulatory basis are now pre-screened by payers in much the same manner as are inpatient admissions. Outpatient pre-screening is typically focused upon a select set of procedures often thought to be unnecessary or costly relative to other alternatives. Examples include cataract extraction, tonsillectomy, arthroscopy and magnetic resonance imaging. This form of prospective utilization management is considered to be a critical component among the next generation of utilization review programs—particularly as a growing proportion of care is delivered on an outpatient basis.
- **Concurrent review of inpatient stays.** At a designated point after admission, a UM examiner will check on the case to see whether the patient might be discharged early; whether care is being rendered in a timely manner so as not to force an unneeded extension in the stay; or if a length-of-stay extension might be necessary due to complications or other factors. Many programs review each emergency admission just after the patient is hospitalized to assure that the admission was indeed justified.
- **Second surgical opinion (SSO) programs.** SSO programs are prospective means for controlling medically unnecessary surgical procedures. SSO programs require the beneficiary to obtain a second opinion from a physician other than the specialist proposing the surgical procedure. If the second opinion confirms the need for the surgery, the procedure is approved for payment under the sponsor's

terms. Failure to obtain a concurring opinion often results in significantly reduced benefits.

- **Discharge planning.** Discharge planning is an approach to assuring that the patient can be released from the hospital at the earliest possible date and still receive needed care. For example, if a patient does not require acute hospital services but does need around-the-clock nursing care, discharge planners can arrange for transfer to a nursing home. Or, if the patient's stay would have to be extended needlessly because there are no family members at home to help out during the post-acute recovery period, then discharge planners can arrange for home health aides to take care of the patient at home. Discharge planning is often done in tandem with concurrent stay review.
- **Catastrophic or large case management.** Many plan sponsors find that the bulk of their health care costs are consumed by a small percentage of the enrolled population. Most of these costs are the result of major illnesses or injuries such as premature infants, high risk obstetrical cases, AIDS and some cancers, and traumatic head injuries, the care for which often runs in excess of \$50,000 or \$100,000 per case. Catastrophic case management places a health professional—one who is engaged by the plan sponsor—in the role of care coordinator for the purpose of assuring that care is delivered efficiently. When necessary, this case manager can waive normal benefit limitations so as to authorize payment for alternative services that may be more economical—for example, home care as a substitute for hospitalization.

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- **Primary care physician case management.** In some health plans having formal ties between the payer and the provider—HMOs, for example—each beneficiary must establish an ongoing relationship with a primary care doctor such as a family practitioner or pediatrician. The primary care physician serves as the single access point to all health services, thus controlling the patients' use of costly specialists, hospitals and other services. Often the primary doctor's controlling role is reinforced through financial incentives for the doctor to contain service use.
 - **Telephone referral services.** Health benefits programs having affiliated provider networks frequently offer referral services whereby beneficiaries can call to locate participating doctors and hospitals capable of providing needed care. Some of these phone-in services employ nurses who can give urgent medical advice to the caller, thus offering immediate comfort to the patient and forestalling costly trips to the doctor's office or emergency room.

Many health plan sponsors also rely upon retrospective review techniques to assure that care is kept under control. Examples of retrospective review methods include:

- **Appropriateness review.** This form of screening applies to individual cases. Its purpose is to make certain, before bills are paid, both that the care rendered was necessary and that it was performed in the proper setting. Services adjudged to have been inappropriate may be denied for reimbursement.
- **Provider profiling.** Health plans whose beneficiaries use particular doctors and hospitals frequently may compile utilization statistics in a

way that allows them to compare providers with each other and with pre-defined standards. An example of a profiling application is checking to see which doctors order many more tests than their peers do for comparable patients. Providers exhibiting unacceptable behavior can then be educated or disciplined.

- **Medical care evaluation studies.** Often, data on health care use by a given population will reveal trends toward inappropriate care. For example, a high rate of cesarean deliveries may be noted across all providers. Such indicators may trigger studies involving examination of samples of actual medical records to determine whether the treatment rendered was indeed appropriate in the aggregate. Any problems that are confirmed can then be made the focus of corrective action.

Utilization Management as a Cost Containment Vehicle

As was noted earlier, one of the ways that HMOs control costs is by reducing hospital admissions and shortening lengths of stay. Thus, to the extent that HMOs do control costs, much of their success can be attributed to utilization management.

Looking at freestanding utilization review programs, there is limited evidence of cost savings in the form of objective multivariate analyses. The impact of two primary types of utilization review—pre-admission certification and concurrent review—has been reported in at least two empirical studies, one an update of the other. In the first study, researchers used data from one insurer's experience with utilization review in 1984 and 1985 and found

savings overall of 8.3 percent. The second study used data from 1984, 1985 and 1986 and reported savings of 6 percent.^{135,136}

Evidence concerning other forms of utilization management is largely anecdotal. With respect to second surgical opinions, for example, plan sponsors have found that the incidence of non-confirmations resulting from second opinions is so small that any medical cost savings from avoided procedures are offset by administrative costs. Many payers have long since abandoned SSO in favor of other UM techniques which purportedly yield a higher return for the resources expended.

One UM technique that is growing in popularity is large case management. A recent Health Insurance Association of America survey of member insurers found that large case management was viewed as cost effective by more than 80 percent of the respondents, surpassing all other UM tools.¹³⁷

Evidence concerning primary care case management as a stand-alone measure emanates from the growing number of State Medicaid programs that are installing it. While not all States are observing net cost savings, some States do report substantial benefits.¹³⁸

¹³⁵ Feldstein, et. al. "Private Cost Containment: The Effects of Utilization Review Programs on Health Care Use and Expenditures," *New England Journal of Medicine*, 1988, pp. 310-314.

¹³⁶ Wickizer, et. al., "Does Utilization Review Reduce Unnecessary Hospital Care and Contain Costs?" *Medical Care*, 1989, pp. 632-647.

¹³⁷ "Trends in Managed Health Care," *HIAA Research Bulletin*, February 1989.

¹³⁸ "Medicaid Case Management: A Rare Bright Spot," *Medicine and Health*, October 7, 1991.

Trends in Utilization Management Programs

Utilization management programs play an important role in managed care in a number of ways. First, as unmanaged fee-for-service plans grow more unacceptable to payers, many employers and insurers are gravitating toward utilization management programs as their initial managed care strategy as depicted in the exhibit on the following page.

Second, there has been a substantial development of specialized utilization management products such as managed mental health care and prescription drug UR programs. As psychiatric/substance abuse treatment and prescription drug costs consume a growing portion of health care dollars, sponsors are finding that specialized UR—coupled with a specialized PPO—can provide a very effective means for containing these rising expenses. There are reportedly at least 300 firms nationwide that offer utilization review services just for psychiatric/substance abuse services.¹³⁹

Third, while many of the utilization management programs described in this section remain vital components of sponsors' managed care portfolios, there is a growing emphasis on more prospective approaches to managing costs through, for example, outpatient precertification programs which assist in identifying and managing potentially high cost cases before hospitalization begins. At the same time, there has been a decreased reliance on retrospective utilization measures which offer little hope for containing costs as the majority of medical care has been rendered by the time such programs are initiated.

¹³⁹ *Open Minds*, February 1990.

Lastly, thanks in large measure to the medical profession's complaints about the administrative costs and hassles of utilization review, there is growing movement toward regulation of utilization management programs. Currently, Arkansas, Florida, Kentucky, Maine, Maryland, Mississippi, South Carolina and Virginia have enacted some form of legislation that requires utilization review vendor programs to be approved by the State and meet specific certification standards. In addition to those named above, 20 other States have either considered enacting such legislation or are awaiting approval.¹⁴⁰

Financial Controls

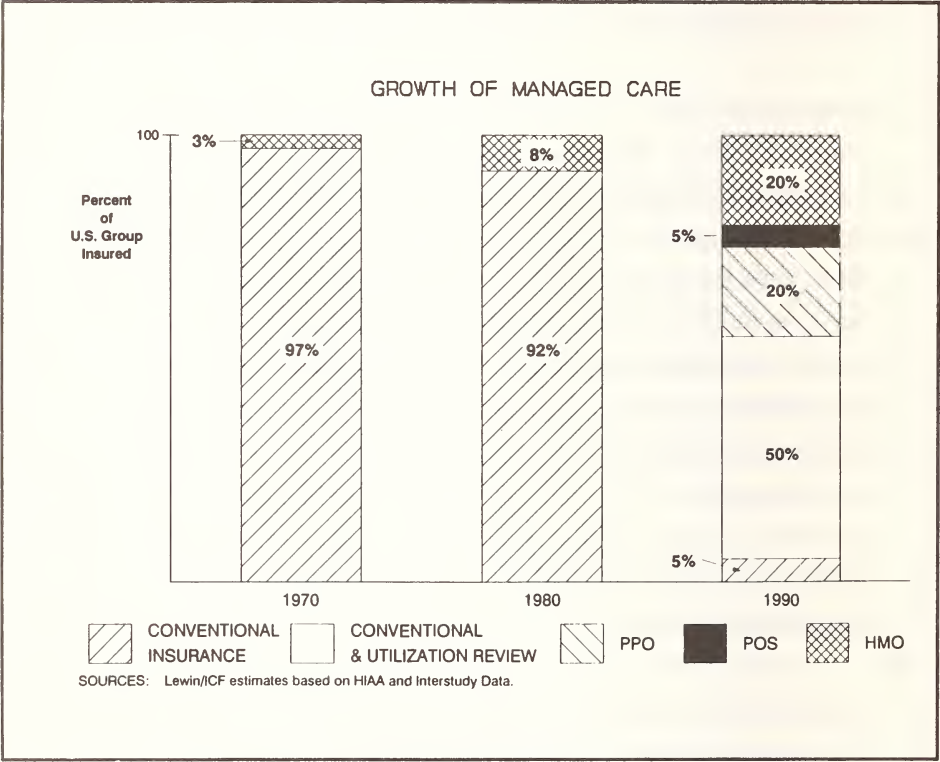
Types of Financial Controls. Within the realm of financial controls, three major types of practices exist. First is beneficiary cost-sharing, an approach used not only to reduce the payer's share of costs but also to encourage beneficiaries to consume health services in the most cost-effective manner. Second are reimbursement arrangements for doctors and hospitals designed both to limit the payer's risk and to motivate the providers to deliver care efficiently. Third are administrative methods that the payer may employ to avoid making overpayments.

Beneficiary cost-sharing takes a number of forms, all designed to make beneficiaries conscious of the costs of health benefits. Plan sponsors hope that cost-consciousness will translate to more prudent consumption. Beneficiary cost-sharing practices, some of which are found in traditional indemnity plans as well as in managed care arrangements, include:

¹⁴⁰ American Association of Preferred Provider Organizations, *Summary of State Utilization Review Legislation and Regulations*, 1990.

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- **Premium sharing.** Concerned employers now require their employees to contribute toward the cost of health benefits through payroll deductions covering a portion of premiums. Premium sharing has two advantages. First, it motivates the employee who may be eligible for coverage as a dependent under a spouse's plan to decline extra coverage that he or she may not need. Second, it encourages employees to look closely at lower cost health plan options such as HMOs or PPOs that may also be more economical for the employer.
 - **Scaled deductibles.** Within their indemnity or self-insured health plans, employers have found it helpful to sensitize employees to health care costs by raising up-front deductibles. Whereas once a per-person deductible of \$50 or \$100 may have been the norm, deductibles of \$150 to \$250, or even higher, are now quite common. Some large employers—Xerox and Time-Warner, for instance—have moved to scaled deductibles stated not as fixed dollar amounts but as percentages of employees' salaries, usually one percent per individual and two percent per family. This form of deductible has two advantages. It moves with inflation as the employee's salary rises over time. And, it links the deductible to each employee's relative ability to pay, thus affecting employees at all income strata in proportionate degrees.
 - **Copayments varying by provider choice.** Many health plans contain alternate copayment levels depending upon the beneficiary's choice of providers or mode of care. In some PPOs, for example, beneficiaries can elect to use PPO doctors and pay coinsurance of 10 percent, or they may go outside the PPO network and pay coinsurance of 30 percent. POS plans employ similar, although often more potent, financial incentives for enrollees to stay within the network. Health

plan sponsors also often set different copayments for the same services if the setting of care is more or less costly. A prime example is surgery, many forms of which can now be done without the patient having to be admitted to a hospital. Such a procedure might be reimbursed at 90 percent if done on an outpatient basis but would be only 70 percent covered if done with the patient being admitted.



Just as beneficiaries can be given financial incentives to behave in a certain fashion, so too can doctors, hospitals and other health care providers. A number of payment practices, described below, are available to purchasers

willing and able to exercise control over the form and amount of provider compensation.

- **Capitation.** Payers having direct and exclusive links with health care providers may structure prices on the basis of a fixed amount per beneficiary per year, commonly referred to as capitation. Capitation payment can cover a single service such as mental health care or, if providers are networked in an organized delivery system such as an HMO, it can cover a complete benefit package. Capitation affords the payer total predictability of costs and alleviates worries that providers will increase volume; any cost consequences of increased volume are the sole concern of the contractor who receives the capitation.
- **Fixed unit prices.** When capitation reimbursement is not feasible, usually because providers are unwilling to assume full risk, then payers seek to control costs by prospectively setting prices to be paid for specified units of service. One form of fixed pricing is a hospital per-case payment system based upon "**diagnosis-related groups**" (DRGs) that was originated in the Medicare program. Under DRG payment, the only variable in determining the cost of a hospital admission is the condition of the patient. The actual length of stay and the intensity of services rendered during the stay do not affect reimbursement, except in extreme cases when "outlier" payments may be triggered. Thus, the payer's risk is greatly diminished compared with charge-based payment.

Another form of fixed pricing is **per diem** payment, whereby the payer and hospital agree in advance to set daily rates for hospital services irrespective of what services are actually provided on a given day. The typical per diem rate structure contains several tiers to reflect the

different intensity of services provided, for example, in an ICU, a standard medical-surgical unit and an obstetrical floor. While the payer remains at risk for both the number of admissions and the duration of each hospital stay, per diem payment reduces the risk of service intensity and eliminates the need to audit hospital bills for reasonableness of charges.

- **Discounts from charges.** When both capitation and fixed unit pricing prove infeasible, payers often seek discounts from providers' normal charges. The rationale behind discounting is that, under selective provider contracting, the payer is agreeing to steer patients to participating providers and away from their competitors. Thus, discounts are meant to reflect the increased volume that the providers can hope to achieve under the arrangement.

The last element in financial control concerns claims payment management. Processing and paying medical and hospital bills is far from being a straightforward activity. Rigorous screening is essential to make certain that payments issued are no greater than the maximum amounts provided for under the particular plan of benefits.

One part of claim screening is usually referred to as **claim adjudication**. The state-of-the-art claim adjudication process involves a number of steps, both automated and manual, that go well beyond basic checking for completeness of submitted claims. Editing and auditing criteria are programmed into the claim processing software which screen claim data for a variety of possible problems, including but not limited to:

- duplicate claims for the same service;

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- claims for non-covered services, which in some instances may be combined with charges for covered services;
 - claims for which the medical procedures listed are not consistent with the diagnosis of the patient;
 - claims for which the site of care appears too costly for the procedure performed, as when surgery that can be done on an outpatient basis is done on an inpatient basis;
 - surgical claims showing codes for multiple procedures that are "unbundled," when one of the procedure codes alone is for the complete package;
 - hospital claims showing an incorrect DRG code which would result in an overpayment if left uncorrected; and
 - claims for services of questionable medical necessity, as defined by the payer's medical policies.

To maintain processing efficiency, the best automated systems employ only those computer edits and audits that are most likely to flag real problems. Excessive suspension of problem-free claims creates both unneeded administrative expense and delays in the issuance of legitimate claim payments. Payers continually strive to achieve an optimal balance between health cost control and processing efficiency.

When computer screening does suspend a claim for manual review, the claim is routed to a person most proficient in handling the problem identified. Trained claim examiners can handle many problems, but clinical expertise is

needed to handle issues of medical necessity and appropriateness. Nurse reviewers may resolve many problems; when they can not, physician advisors are called upon for final judgment.

Another component of effective claim management is commonly referred to as **third party liability (TPL) recovery**. TPL recovery is a process by which a payer determines if another insurer may be liable for part or all of the cost of a claim and then pursues payment so that each payer pays its proper share. A key form of TPL recovery is known as coordination of benefits (COB), which applies when a beneficiary is covered by multiple health insurance plans.

Successful TPL recovery performance depends upon two things. First, the payer must be able to identify when another insurer might cover a particular beneficiary for a particular claim. This task is nominally accomplished by checking the claim form for data on other insurance coverage held by the patient. The claim form may also contain information indicating that the services received by the patient were the result of a workplace injury covered by worker's compensation or a car accident covered by an automobile insurance policy. More aggressive claim payers also check enrollment records to see if other coverage might have been noted at the time the beneficiary enrolled, as well as files of previous claims for the patient that may have been coordinated with other payers.

Second, the payer must actually pursue recovery of any third party liability identified. Such effort requires dedication of personnel knowledgeable in insurance industry rules pertaining to COB, plus careful tracking of claim status during the time recovery is being sought.

Financial Controls as a Cost Containment Vehicle. It is questionable whether many of the financial controls described actually reduce health spending for the entire system. Some observers argue that financial controls do save money for the payers that use them, but that providers often react by increasing their charges to those payers who do not employ controls. One analysis asserts that one-fourth of indemnity insurers' claims costs are attributable to provider cost-shifting.¹⁴¹

Real savings may be yielded when financial controls operate to motivate beneficiaries and providers to consume fewer health care resources. Studies have shown that beneficiaries use fewer services when faced with cost sharing¹⁴² and that physicians may order fewer procedures when given a financial incentive to do so.¹⁴³

Providers and other groups are concerned that some types of financial controls may create a conflict of interest that could affect quality of care. A 1988 GAO report concluded that the more closely financial incentives are linked to treatment decisions about individual patients and to physician performance over short periods of time, and the more substantial the amount of financial risk to the physician for services provided by other physicians or institutions, the greater the potential threat to quality of care.

Trends in the Use of Financial Controls. Payers, beneficiaries and providers all want greater predictability of their respective portion of health

¹⁴¹ Coddington, et. al., "Cost Shifting Overshadows Employers' Cost-Containment Efforts," *Business and Health*, January 1991.

¹⁴² Newhouse, et. al., "Some Interim Results from a Controlled Trial of Cost Sharing in Health Insurance," *New England Journal of Medicine*, December 17, 1981.

¹⁴³ Hillman, et. al., "How Do Financial Incentives Affect Physicians' Clinical Decisions and the Financial Performance of Health Maintenance Organizations?" *New England Journal of Medicine*, July 13, 1989.

care costs. Consequently, one can see growing use of reimbursement strategies that allow all parties to know their financial responsibilities in advance—such as per case and per diem payments for hospital care and capitation and package pricing of physician fees. Furthermore, these financial controls are no longer limited to just hospitals and doctors. Instead, all health care providers—including pharmacies, durable medical equipment providers and home health care agencies—increasingly are subjected to cost containment measures.

Conclusion

Not too long ago, managed care strategies were limited solely to HMOs and other more narrowly applied forms of cost containment. Now, however, payers increasingly realize that traditional approaches to insurance do not provide mechanisms to control costs. As a result, many health plan sponsors have made major commitments to develop and maintain extensive managed care strategies.

Each of the three categories of managed care described in this paper—organized delivery systems, utilization management, and financial controls—represents a critical component of a rigorous, comprehensive health benefits management program. Some of the various managed care practices identified can be employed in isolation, but a payer who combines the available measures can yield synergistic benefits resulting in more effective health cost management. Employment of these practices requires careful coordination, however, in order to respond to the often conflicting interests of the beneficiary, the health care provider and the payer.

Considered from a public policy perspective, managed care appears to offer both useful lessons and potentially productive application.



HEALTH CARE RATIONING

Health care rationing has emerged as one of the most difficult and pressing social questions of our time. Some health care rationing occurs today in the U.S. largely according to ability to pay. Those who are insured or have sufficient financial resources appear to have better access to care than the uninsured and the poor. The current debate over rationing concerns allocating health care resources on some basis other than income.

Spending on health care currently accounts for 12 percent of our gross domestic product and has been increasing by about 5 percent per year in excess of inflation. This rapid rise in spending has occurred in a market characterized by extensive insurance and government programs designed to expand access to care. Efforts to control overall spending on health care have not been successful and have thus prompted interest in the control of spending through rationing of care.

Recent interest has also been stimulated by the efforts of the State of Oregon to implement a program which would explicitly ration health services to those insured under Medicaid. In an effort to both improve access to care for its uninsured residents and control spending, Oregon has proposed to limit the availability of treatment for selected illnesses for participants in the Medicaid program. Under the plan, treatment for each illness would be prioritized using a formula which considers both potential benefits and costs. While the State has been criticized for proposing to explicitly ration care to the needy population, it has also been praised for its efforts to expand access to those without insurance and its candid evaluation of State-imposed rationing as a potential solution to its access problems.

The Oregon plan has not yet been approved by Federal Medicaid authorities. However, the prospect of a public policy that incorporates explicit rationing of care raises many important issues. The idea that we may deny life-saving technologies to some who need them is both unpalatable and unfamiliar to many Americans. It would force physicians to radically alter their notion of their obligations to patients and society. It would also raise vexing legal questions regarding the signal that should be sent to physicians regarding what constitutes appropriate care, and the function of the medical malpractice system.

There are essentially two ways in which health care resources can be allocated. The first method, already common in the U.S., is to ration health care on the basis of price. As we will discuss later, a number of studies indicate that patients without an ability to pay receive less care than those who are well-insured. Price rationing is the mechanism by which most goods and services in the U.S. are allocated: we enjoy the freedom to choose how to use our resources and accept the fact that some individuals have more resources than others. Whether or not we agree that this mechanism should be used for life-saving therapies, price rationing of health care is already common in the U.S. Millions of Americans are uninsured and Medicaid recipients and others with inadequate insurance also have difficulty gaining access to physicians and high quality acute care medical facilities.

A second way to allocate resources is called "non-price" rationing: under this type of system, the government generally determines the quantity and prices of services that are made available. The prototype for non-price rationing is the use of gasoline ration cards during the Second World War. In the face of a shortage, the Federal Government decided that allowing markets to allocate scarce gasoline resources was inappropriate, and instead each citizen was given the option to purchase a small portion of gasoline at a

fixed price. Applied to health care, non-price rationing would mean that even those with an ability to pay for care would not be allowed to do so. Non-price rationing for medical care has not been applied broadly in the U.S., although (as we will discuss) it appears to be a regular feature of health care systems in some other industrialized nations. The organ transplant program and kidney dialysis prior to ESRD are two examples of "non-price" rationing in the U.S.

The main focus of this paper is non-price rationing. As explained above, this means of allocating care is what is commonly meant when health rationing is discussed. To simplify the exposition, the word "rationing" will thus be used to mean non-price rationing.

The paper begins with a discussion of the debate over over the necessity of health care rationing. Many have argued that rationing of health care is the only way to control the long-term rise in health spending. This argument is based on the evidence that health care costs rise because of factors that are difficult to control, such as technological advances, the rising price of labor supplies, demographic factors, and the extensive use of insurance to finance care. Other health policy analysts disagree, arguing that rationing will not be necessary because costs will be contained by eliminating unnecessary care and increasing the efficiency with which this care is delivered.

If care is to be rationed, a variety of difficult questions regarding how care will be allocated will also need to be addressed. A system of rationing would also force us to confront deeply founded cultural values against denying care. In addition, the American legal system would need to be revised if cost containment is to be considered reasonable grounds for the denial of beneficial care to a patient. Although there are currently no answers to these questions, consideration of each is important to understand

the range and importance of the issues surrounding a decision to explicitly ration care.

Interest in rationing is not unique to this country, and studies of health care in other countries, such as Britain and Canada, are used throughout to illuminate the discussion of rationing in the U.S. An American approach to health rationing can be expected to differ from that used in any other country because of the unique features of our markets, culture, and political system. Nonetheless, models of how health care is rationed in other countries lend an important perspective on both the implementation and ethical problems involved.

We conclude by considering the likely future of health care rationing in this country. Rationing on the basis of price is a common phenomenon in the U.S. and is likely to continue to some degree despite efforts to reduce access problems. However, it is also likely that systems of non-price rationing, similar to that currently being proposed by Oregon, will be seriously considered by future legislators concerned with containing spending.

The Necessity of Health Care Rationing

Given the difficult decisions that must be faced under rationing, it is not surprising that there is considerable controversy over whether health care rationing is necessary. Although nobody really wants to explicitly ration health care, many have argued that it will be necessary in order to contain the rise in health care costs. Debate over the necessity of health care rationing thus focuses on whether costs can be controlled without doing so, and how rationing should be accomplished if it is deemed necessary. This section presents arguments on both sides of the rationing debate.

Rationing Is Not Necessary

Opponents of rationing argue that by improving the efficiency and effectiveness of the American health care system, we can control costs sufficiently to make non-price rationing of services unnecessary. In a *New England Journal of Medicine* editorial, Arnold Relman grapples with what he calls "the central health policy questions for the 1990s: can we improve our health care system sufficiently—and soon enough—to avoid either systematic rationing or more restriction of access through pricing?"¹⁴⁴ Relman argues that we can, asserting that "in a country that spends as much as we do on health care, there should be no need to deny medically necessary services to anyone."

Joseph Califano frames a similar argument in terms of economic efficiency, asserting that rationing is not necessary because it will be possible to create an efficient health care system that is not overly costly. As he writes, "we can shape a competitive system of excellence and motivate doctors and hospitals to provide less expensive care and patients to stay healthy."¹⁴⁵ Califano further implies that non-price rationing is not necessary since "we have the capacity to provide quality care for all at reasonable cost."

Rationing Is Necessary

Many health policy analysts strongly believe that containing the rise in costs through greater efficiency and the elimination of unnecessary care is not a realistic scenario. William Schwartz and Henry Aaron were among the first

¹⁴⁴ Arnold S. Relman. "Is Rationing Inevitable?" *New England Journal of Medicine*, June 21, 1990, pp. 1809-1810

¹⁴⁵ Joseph Califano, *America's Health Care Revolution*, New York, Random House, 1986).

to argue that rationing was inevitable and necessary. Their argument was not based on the desire to ration care from any moral or practical ground, but rather the conviction that rationing will be necessary in order to control rising costs.

Acute care costs rise, they note, not because of inefficiency but rather because of three primary factors: technological innovation, the rising relative prices of labor and supplies, and changes in demographics.¹⁴⁶ Hospitals and physicians can do nothing about the increase and aging in the population. Similarly, it is virtually impossible for hospitals to retain existing personnel, recruit new employees, and purchase the highest quality supplies without accepting the rising costs of these inputs. The only area left to target is thus technology, which accounts for about half of the rise in acute care costs.¹⁴⁷ However, as Schwartz and Aaron argue, restricting the availability of technology would ultimately involve the denial of beneficial services to patients who could afford it. They argue that "the choices we face are clear and painful. The U.S. can suffer a continual increase in medical expenditures . . . or it can impose effective limits."¹⁴⁸

Daniel Callahan is another spokesman for rationing.¹⁴⁹ According to Callahan, a sound health care system must involve: (1) equity (access for all to a base level of care); (2) efficiency (a means of limiting procedures that

¹⁴⁶ William B. Schwartz, "The Inevitable Failure of Current Cost-Containment Strategies. Why the Can Provide Only Temporary Relief," *Journal of the American Medical Association*, 257, January 8, 1987, pp. 220-4.

¹⁴⁷ Sylvia Hurdle and Gregory C. Pope, "Physician Productivity: Trends and Determinants," *Inquiry*, Vol. 26 Spring 1989, pp. 100-115; and William B. Schwartz, "The Inevitable Failure of Current Cost Containment Strategies."

¹⁴⁸ Henry J. Aaron and William B. Schwartz, *The Painful Prescription. Rationing Hospital Care*, The Brookings Institution, Washington, DC, 1984.

¹⁴⁹ Daniel Callahan, *Setting Limits: Medical Goals in an Aging Society*, Simon and Schuster, New York, 1987.

are ineffective or marginally effective); and (3) some consensus on health care priorities. According to Callahan, several deeply ingrained values work against these goals: (1) we prize autonomy and freedom of choice; (2) we cherish the idea of limitless medical progress; and (3) we demand quality in health care, which often involves expensive amenities.

Callahan recently summarized his ideas in a *New England Journal of Medicine* editorial.¹⁵⁰ "The trouble with medical progress," he says, "is that it is intrinsically limitless in its economic possibilities." He favors "devising and learning how to live with a less expansive health care system, and a less expansive idea of health." Callahan asserts that we will not be able to resolve the problem of rising costs "unless we can come to see health care as being like fire, police, and defense protection—a necessity for the public interest rather than a market commodity." He urges that "we must be willing to exempt some health care policies and decisions from the market ideology in the name of the common good."

Reconciling Conflicting Points of View on the Necessity of Rationing

All analysts share the conviction that rationing should not be used before other, more conventional measures to reduce unnecessary care and inefficiency have been proven ineffectual. Most would also agree that costs rise due to technological improvement and the prices of labor and supplies, and that once efficiency in the health care system has been achieved, we will face the three-pronged choice: (1) allow costs to rise; (2) ration on the basis of price; or (3) adopt non-price rationing.

¹⁵⁰ Daniel Callahan, "Rationing Medical Progress: The Way to Affordable Health Care," *New England Journal of Medicine*, June 21, 1991, pp. 1810-1813

Analysts disagree on two major points. The first is where we currently stand relative to an efficient health care system. Some believe that we have reached the point where it will be highly difficult to continue improving efficiency in the hospital system, based on the observation that hospitals are having increasing trouble reducing the number of patient days and improving internal operating efficiency.¹⁵¹ Others strongly disagree, arguing both that inefficiencies exist and they should be removed.¹⁵² As government efforts to control spending and improve the efficiency of care provided are expanded, this dispute should be resolved; it will then be clear whether the historical rate of growth in spending is being attenuated.

The second point on which analysts disagree regards what should be done when we reach a point of efficiency. This decision is not strictly analytical, as it involves many judgments and decisions that can only be made through the political process. The many difficult and complex logistical, legal, and ethical problems associated with non-price rationing are the subject of the following three sections of this paper.

Rationing Criteria

A decision to adopt non-price rationing of health care would necessitate adopting policies that determine who would and would not receive care. In order to satisfy the public, a rationing system adopted by policy makers

¹⁵¹ William B. Schwartz and Daniel N. Mendelson, "Hospital Cost Containment in the 1980s: Hard Lessons Learned and Prospects for the 1990s," *New England Journal of Medicine*, April 11, 1991.

¹⁵² Arnold Relman, *op. cit.*; Joseph Califano, *op. cit.*

would have to reflect both the relative benefits involved in various kinds of treatments, the costs of treatment, and a variety of non-clinical concerns.¹⁵³

A natural place to begin rationing is to try to eliminate interventions that are expensive, but that do not result in large benefits to patients. This might include both therapies that always result in only a marginal improvement in health status and those that yield substantial benefits to a patient but only highly infrequently. Every proposal to ration care has incorporated some element of this strategy.

Benefit Curves and Public Perceptions

A useful theoretical model for establishing rationing criteria is the notion of a "medical benefit curve."¹⁵⁴ Benefit curves reflect the range of possible benefits that each medical intervention might be expected to yield. The benefits resulting from a given intervention will depend upon the type of intervention, the health status of the patient, and a range of other factors. Some interventions may result in substantial benefits in selected cases and few benefits in others. Knowing how much each intervention costs, if it were possible to actually derive benefit curves for all interventions, we would theoretically be able to calculate what allocation of resources would maximize benefits to patients. In reality, of course, we cannot do so. It is difficult to define what constitutes a benefit (construction of benefit curves would require valuing different types of benefits such as relief of pain, restoration of physical mobility, and saving lives).

¹⁵³ Although any such program would also probably have important income distributional effects, we do not discuss this here.

¹⁵⁴ Henry J. Aaron and William B. Schwartz, *The Painful Prescription*, Chapter 6. A simplified variant on this concept was also used by the State of Oregon in their recent Medicaid waiver request (discussed above).

In addition, human decisions are rarely based solely on rational criteria. As shown in psychological research, fear of the unknown, risk aversion, lack of understanding of probabilities, and many similar concepts are important determinants of everyday decisions.¹⁵⁵ Certain diseases carry social stigma or engender sympathy. Therefore, even maximizing total (clinical) benefits to patients would probably not result in comfort with the allocation decisions being made.

This point is illustrated by many of the decisions made in Britain in order to limit the level of health spending. The treatment of cancer, which engendered fear and dread among the British public, received a disproportionately high level of spending.¹⁵⁶ Treatments involving a large number of potential patients are less likely to be funded than treatments yielding the same benefits that would serve fewer people. Diseases that are more obscure are less likely to command resources than those which are generally known to the public.

The same point was also illustrated through the Oregon prioritization process. Oregon's initial proposal to ration health care services was based largely on utilitarian principles of cost-effectiveness. When the list was published, many of the treatment decisions offended public notions of what should receive priority, and the State weighted public judgements more heavily. As expressed by David Hadorn, the experience taught that "the use of cost-effectiveness analysis is unlikely to produce a socially or politically acceptable definition of necessary care."¹⁵⁷

¹⁵⁵ Kahneman and Tversky, "Judgments Under Uncertainty: Heuristics and Biases."

¹⁵⁶ Henry J. Aaron and William B. Schwartz, *The Painful Prescription*, p. 110.

¹⁵⁷ David C. Hadorn, "Setting Health Care Priorities in Oregon: Cost-Effectiveness Meets the Rule of Rescue," *Journal of the American Medical Association*, May 1, 1991, pp. 2218-2225.

Logistics of Budgeting and Control

It is thus likely that any system used to ration care will incorporate both elements of clinical rationality and public perception. There appear to be two fundamental ways in which this might be achieved. The first is to set budgets globally for each provider, and to entrust the task of rationing to physicians and hospital administrators (the approach adopted in Britain).

The second approach is for insurers or the government to specify which ailments, treatments, or patients will be reimbursed through a critical assessment of the costs and benefits of treatment. This approach has been receiving the majority of attention in the U.S. in recent years and is also an approach which might be consistent with the patchwork insurance system currently in place in this country. Although an explicit system of health rationing appears to lend more control to patients through the process of public deliberation, there is also a variety of difficult logistical problems that must be considered because it requires a detailed listing of which services will or will not be carried out for which patients.

The difficulties involved in a rationing approach based on covering only selected illnesses have recently been extensively debated in Oregon. Oregon based its system on the standard listing of diseases that does not account for the condition of the patient, the patient's age, or other important factors that would help determine the efficacy of treatment.

An approach that has been used in both Britain and Canada is rationing access to expensive medical devices and procedures. For example, high technology equipment is a natural target for rationing decisions because it contributes substantially to the rise in costs. Controlling the supply of technology creates a natural barrier to performing additional tests and

procedures. John Iglehart has recently observed that this is one of the major strategies used to contain costs in Canada;¹⁵⁸ the U.S. has nearly eight times more MRI and radiation-therapy units per capita than Canada, more than six times as many lithotripsy centers, and roughly three times as many cardiac catheterization and open-heart surgery units. The same applies in diffusion of new procedures: Iglehart cites the case of cardiovascular surgery in which new methods of treating heart attack victims increased the number of patients requiring cardiac procedures. Because supply was not adequate to meet the increased demand, queuing resulted.

Finally, it is also possible to ration based on the characteristics or condition of the patient. Daniel Callahan has suggested that, among other patient characteristics, age should be used in the rationing of care.¹⁵⁹ This proposal is highly controversial. Age is commonly (informally) used to ration care under the British system. Norm Levinsky argues strongly that age should not be a criterion for health care rationing in the U.S., but instead, resources should be rationed "according to the probability that a patient will benefit."¹⁶⁰ Of course, we might expect a correlation between the probability that the patient will benefit and the patient's age, depending on how we define benefit.

¹⁵⁸ John K. Iglehart, "Canada's Health Care System Faces Its Problems," *New England Journal of Medicine*, 22 February 1990, p562-568.

¹⁵⁹ Daniel Callahan, *op cit*.

¹⁶⁰ Norman Levinsky, "Age as a Criterion for Rationing Health Care," *New England Journal of Medicine*, June 21, 1990, pp. 1813-1815.

Rationing and the American Legal System

Health care rationing might result in an increase in the number of malpractice suits without a change in the legal system. Ultimately, rationing would thus require revising the notion of "appropriate care" that is currently used by juries to establish malpractice liability.

The purpose of the medical malpractice system is twofold: to allow patients to address negligent acts by physicians in court, and to send a clear signal to physicians regarding their obligation to patients. Through the American legal process, we allow juries to decide whether physicians have provided care that is considered appropriate. At issue is what constitutes an "appropriate" level of care, whether this level should vary according to whether and how a patient pays for their care, and whether efforts to ration care based on non-price criteria would constitute a usable defense against a malpractice suit.

The courts have repeatedly ruled on this question in recent years. The consensus of the court is summarized in a recent decision in *Wickline v. the State of California*. The court deemed that both providers and insurers can be held responsible "when medically inappropriate decisions result from defects in the design or implementation of cost containment mechanisms."¹⁶¹ It seems reasonable to assume that, unless addressed by statute, attempts to limit costs by denying beneficial care to patients would thus be considered malpractice.

Should we decide that rationing is necessary, this rule would have to change. In accordance with our decisions on who is entitled to care, we would need to modify the malpractice system to uphold and enforce such decisions. For

¹⁶¹ Wickline vs. State of California, *California Reporter*, 228, 661, 1986.

example, consider the case of a procedure yielding only small benefits, such as a routine CT scan for patients complaining of headaches. If a physician did not provide this service in order to contain costs, and we deemed the control of costs in this manner to be appropriate, it would not be possible to hold a physician liable for adverse outcomes in this situation.

Such a change could be carried out by exempting specific procedures from the purview of the malpractice system, or by changing the definition of what constitutes appropriate care. In either case, there would be important implications for both physicians and patients regarding who could use the malpractice system and the types of suits that could be pursued. In accordance with such guidelines, peer review and institutional accreditation would also have to be modified in order to send a clear signal to physicians and patients regarding what care is appropriate in what situations.

Ethical Issues Raised by the Prospect of Rationing

The fundamental ethical issue raised by the prospect of health care rationing is the denial of treatment to a person who would be expected to benefit from it. When asked, Americans generally express the belief that access to health care is a right that should not be denied to anyone. This position is deeply rooted in our culture, and the notion that saving a life might carry expense that might be used for other worthy goals is not considered important.

However, while the sanctity of life is part of our cultural heritage, when asked whether they would be willing to accept higher taxes to fund such care, most Americans say no. Furthermore, as we have previously noted, health care is routinely rationed in this country on the basis of price, as those

who are unable to afford care often have difficulty obtaining it, especially when a condition is not life-threatening. Tolerance of price rationing fundamentally contradicts many of the ethical values expressed by Americans today.

Recent debate on non-price health care rationing has raised public awareness and sensitivity to price rationing, as many Americans have only recently learned that the volume and quality of services received by the poor differs substantively from that received by those who are well-insured. In addition, the prospect of explicit non-price rationing has highlighted a variety of important ethical issues, including the control of expensive high-technology procedures, the role of the public in rationing decisions, and the role of physicians in the rationing process.

Technological Development and the Rationing Decision

Any effort to ration care would almost certainly involve restrictions on the availability of high-technology care, as noted above. However, the potential for rationing technology must be considered in light of the recent dramatic advances in the abilities and expense of new technologies. In short, technology has developed faster than our ethical decision-making, leaving a variety of ethical issues that must be resolved through rationing or other means.

A dramatic example is the treatment of very low birth weight babies, a subject that has received substantial attention in the press, as well as in hospital ethics committees. The debate revolves around babies who are born mid-term and generally weigh less than 750 grams. As indicated in a recent

New York Times article,¹⁶² "these are the babies who test the limits of medical technology. About half will live, but three-quarters of those will have neurological damage." These statistics greatly understate the success rate for the many such babies that are born with HIV infection, perinatal addictions, or the inability to circulate their own blood. Treatment of all neonates involves long stays in intensive care units at very high expense. These expenses are often not covered by insurance because low birth weight babies occur disproportionately among minorities and teenagers, groups likely to be uninsured.

This example illustrates that the presence of new, advanced, expensive technology forces consideration of two primary ethical issues. The first is, what medical guidelines should be used for making decisions about how much care these patients should receive? Many hospital ethics committees grapple with such issues on a regular basis. However, liability and ethical concerns usually prevent committees from issuing usable guidelines for treatment.

The second question, more germane to the question of health rationing, is whether this treatment is a cost-effective use of society's resources. As expressed by the *New York Times* article, "where do arguments about the sanctity of life end, replaced by hard-nosed arguments about which lives are worth saving and at what cost?"¹⁶³ Withholding treatment would constitute the denial of some beneficial services, yet we have few ethical protocols to use in such circumstances.

¹⁶² Gina Kolata, "Parents of Tiny Infants Find Care Choices Are Not Theirs," *New York Times*, September 30, 1991, pp. A1 & A14.

¹⁶³ *Ibid.*

The Public Role in the Rationing Process

Many Americans have come to agree that technology and the rise in costs might necessitate rationing of some type. However, a number of ethical questions are raised in considering what might be an acceptable system to allocate health care. The first question is whether our current system of price rationing is an acceptable solution to the problem of allocating these resources. Price rationing is what we are accustomed to, and what we are equipped to do at the present time; however, many Americans currently find it unacceptable.

Given our democratic orientation, the question of how to adequately incorporate public input must be addressed as a component of any future initiatives to ration care. For example, the British system has been criticized by John Kitzhaver of the Oregon State Legislature as follows:

Despite its many merits, the NHS is a system which rations implicitly, not openly or equitably. It relies on primary care physicians and bureaucrats to make rationing decisions, from which those affected have no recourse.¹⁶⁴

The complexity of this question has already been seen in debate over Oregon's proposal to ration Medicaid services (discussed in more detail above). It has been reported that of the 1,000 Oregonians who attended the 47 public meetings throughout the State, two-thirds were college graduates and two-thirds were also employed in the health care industry.¹⁶⁵ Fewer

¹⁶⁴ John Kitzhaver, "The Oregon Health Access Plan: A Step Toward a Solution," *New York Times*, July 13, 1990.

¹⁶⁵ Jennifer Dixon and H. Gilbert Welch. "Priority Setting: lessons from Oregon," *The Lancet*, April 13, 1991, pp. 891-894.

than 50 attendees were Medicaid recipients. This has drawn criticism, most notably from ethicist Norman Daniels.¹⁶⁶

We can also anticipate ethical problems reconciling rationing with our notions of discrimination. For example, if we chose to try to eliminate much care that added only short amounts of time to the patient's life, this policy would be likely to have an adverse impact on the aged. Any proposal to ration services that survived the analytic process would then be subject to intense lobbying efforts and other aspects of the political process.

The Role of Physicians in the Rationing Process

Adoption of non-price rationing would also necessitate important changes in the role of physicians, and the means by which we make decisions about the allocation of health care resources. The role of physicians would perhaps require the most substantial change. Currently, the role of physicians is largely defined by the well-known Hippocratic oath, which establishes physicians as patients' advocates, and obligates them to pursue all potentially effective treatment.¹⁶⁷ Physicians also greatly value their autonomy to make clinical decisions and resent any attempts by government or administrators to restrict these decisions or access to resources.

To the extent that physicians must serve as the "gatekeepers" who ensure that care is allocated in a way consistent with the desires of the public, health care rationing would require a fundamental change from the role of patient advocate. Under a system of rationing, physicians would be forced to

¹⁶⁶ Norman Daniels, "Is the Oregon Rationing Plan Fair?" *Journal of the American Medical Association*, May 1, 1991, pp. 2232-2235.

¹⁶⁷ This ideal notion does not always accurately describe reality. See Paul Starr, "The Social Transformation of American Medicine."

acknowledge that they are unable to do everything possible for the patient if they are to optimize the use of resources. There are many ways in which a physician might justify this position. In their observations of Britain, Aaron and Schwartz observe that "the British physician often appears to rationalize, or at least to redefine, medical standards so that he can deal more comfortably with resource constraints."¹⁶⁸ They illustrate this point by quoting a British physician as follows:

The sense that I have is that there are many situations where resources are sufficiently short so that there must be decisions made as to who is treated. Given that circumstance, the physician, in order to live with himself and to sleep well at night, has to look at the arguments for not treating a patient. And there are always some—social, medical, whatever. In many instances he heightens, sharpens, or brings into focus the negative component in order to make himself and the patient comfortable about not going forward. He states the reason for not going forward in medical terms . . . but that formulation in many instances is in no small part conditioned by the fact that there really aren't enough resources to treat everybody, and there is a kind of rationalization which is, perhaps, influenced by resource constraints.

Rationing Health Care in America

The tragic and dramatic death of a 7-year-old boy named Coby Howard typifies the American dilemma over health care rationing. Howard died in Oregon when he was denied a bone marrow transplant in 1987 after a decision by the State Medicaid program to not fund this expensive and (at

¹⁶⁸ Henry J. Aaron and William B. Schwartz, "The Painful Prescription."

that time) low-benefit procedure. The decision not to fund transplants was made in order to expand State funding for prenatal care. Although the rule had been passed with the best of intentions, the result was visibly tragic and was followed by a public outcry of massive proportion.¹⁶⁹

Less visible and perhaps even more tragic is the routine denial of care to millions of Americans who are unable to pay for services. Examples of this behavior are commonly found in health policy literature. Uninsured Americans under age 65 use two-thirds as many physician office visits than those with insurance.¹⁷⁰ Uninsured pregnant women see a physician an average of 23 percent fewer times during pregnancy,¹⁷¹ and thus carry a greater risk of birthing complications. The proportion of uninsured women receiving a variety of preventive clinical services was about 15 percentage points below those insured.¹⁷² The prevalence of drug addiction and malnutrition among the poor make this group even more prone to health problems, many of which are treated by urban hospitals on an emergent basis.

The thought of health care rationing contradicts both our ethical heritage and what we have come to expect from the American health care system. It is clear that Americans will pursue all means possible to prevent non-price rationing from becoming necessary, and, in fact, we may well adopt new laws that alleviate some of the more objectionable price rationing that currently exists. Yet many have come to believe that rationing of health

¹⁶⁹ Jennifer Dixon and H. Gilbert Welch, "Priority Setting: Lessons from Oregon."

¹⁷⁰ Lewin-ICF analysis of the 1980 *National Medical Care Utilization and Expenditures Survey* (NMCUES), updated to reflect trends in utilization, health expenditures, and population in 1988.

¹⁷¹ *Ibid.*

¹⁷² Stephanie Woolhandler and David Himmelstein, "Reverse Targeting of Preventive Care Due to Lack of Health Insurance," *Journal of the American Medical Association*, Vol. 259, 1988, pp. 2872-4.

care, either by price or other means, is inevitable due to the rise in costs stemming from technology and the costs of medical inputs.

The problem with rising health care costs in the U.S. is not unique. All other industrial countries face similar problems and, in some cases, they have turned to rationing as a solution to these problems. As we have shown, the experience of these countries lends a unique and important perspective to the consideration of rationing in this country. It is important to recognize, however, that if rationing is adopted here it is also likely to be different from that adopted in other countries. Further, the American temperament and the current functioning of our medical and legal systems will have an important influence in shaping a system of health rationing, should we adopt one.

With Oregon's application for a Medicaid waiver to ration care, we have also experienced an important and lively debate on health rationing in this country. John Kitzhaver's characterization of the Oregon proposal as "a starting point in the process of moving toward an improved health care system"¹⁷³ is both modest and accurate—modest because the Oregon legislature's explicit consideration of health rationing has raised the level of debate on this important subject well beyond where it had been previously; and accurate because the problems and challenges involved in devising a system of health care rationing that is acceptable to the U.S. public will probably continue to occupy us all for many years to come.

¹⁷³ John Kitzhaver, "The Oregon Health Access Plan."



COST CONTAINMENT AND QUALITY OF CARE

During the last ten years, several strategies have been pursued to control health care costs. These strategies have been targeted both to the demand for and supply of health care. For example, provider reimbursement incentives have been created to influence providers to use less resources. In addition, many employers and insurers have increased patient cost-sharing in order to raise consumer price sensitivity to health care decisions. The increased emphasis on cost control has raised concerns about the implications of these strategies on the quality of care patients receive.

Many existing cost containment strategies are intended to eliminate unnecessary and low benefit care while preserving care that is of value. The question posed by many policy makers is the extent to which these approaches have successfully targeted waste and inefficiency or whether quality of care has been jeopardized. This paper examines the evidence on cost containment and quality of care for two strategies: (1) incentives to influence provider behavior and (2) incentives to influence consumer behavior. It begins by defining quality of care and discussing the approaches used to measure quality.

What Is Quality?

Assessing the impact of cost containment strategies on quality of care requires understanding what is meant by quality. Quality of care is inherently subjective. As such, it is difficult to define and measure. This

section presents several definitions of quality and discusses efforts undertaken to measure quality.

Definitions of Quality

A great deal of research has been devoted to defining quality of care and definitions have often focused on different aspects of quality. For example, some define quality by the credentials and performance of providers; others define quality through health status outcome measures, while still others use perceptions of patient satisfaction as quality indicators. The Office of Technology Assessment has defined the quality of medical care as "the degree to which the process of care increases the probability of outcomes desired by patients and reduces the probability of undesired outcomes, given the state of medical knowledge."¹⁷⁴ As this definition implies, medical care quality concerns the adequacy of the diagnostic and therapeutic process vis à vis the patient's clinical condition.

Some experts also refer to another dimension of health care quality—one that takes into account the patient's comfort and feelings about the treatment process. This dimension is potentially important in the context of studying cost containment strategies because cost cutting in some areas of health care may be more likely to affect a patient's comfort than his/her clinical status. For example, a policy of shorter hospital stays for a given diagnostic condition may not have much impact on objective clinical measures, but may result in some discomfort for patients who must care for themselves at home. For many analysts, this discomfort should be treated as an aspect of medical care quality.

¹⁷⁴ Office of Technology Assessment, *The Quality of Medical Care: Information for Consumers*, June 1988.

Increasingly policy makers are moving away from discussions of quality and focusing on the value of the care received. The notion of value contains many of the same elements as quality. In assessing value, questions of quality of life and use of medical technology become paramount. Questions such as these are part of the debate on health care rationing as a cost control strategy.

Measures of Quality

As the concept of medical care quality has evolved over time, so have approaches to measure it. Experts often distinguish among three general approaches to the measurement of medical care quality: structure, process, and outcome.¹⁷⁵ Structural measurements represent the descriptive or material characteristics of facilities or providers (e.g., the soundness of a building, whether signs are posted where they should be, and the credentials of health care providers working within a facility). Process measures focus on what a provider does to and for a patient (ordering tests when indicated by clinical criteria) and how well a patient progresses through the medical system. Outcomes reflect what happened to the patient, in terms of palliation, treatment, cure, and/or rehabilitation. As Brook has observed, "the conceptual distinction among these measures is important to maintain because in essence they measure different things: the resources necessary to solve a problem, the way the problem was solved, and the results of the problem-solving, respectively."¹⁷⁶

¹⁷⁵ A. Donabedian, "A Guide to Medical Care Administration," *Medical Care Appraisal—Quality and Utilization*, New York, American Public Health Association, 1969.

¹⁷⁶ R. Brook and A. D. Avery, *Quality Assessment: Issues of Definition and Measurement*, The Rand Corporation, March 1976.

Structure and process measures have long been important to the licensure and accreditation of health care facilities and providers. Recent discussions of quality measures have focused on the following medical outcomes.

Mortality. Mortality rates have perhaps become the most commonly used outcome measure for evaluating health care services. The Federal Government recently began to publish mortality rates for each hospital that participates in the Medicare program as one measure of quality of care delivered by the hospital. The primary limitation of mortality rates is that they do not capture health status differences among patients. For example, a hospital may have a higher mortality rate because it treats a higher proportion of severely ill persons.

Morbidity. Morbidity rates are more sensitive than mortality rates to subtle health status differences among patients. Recently, researchers have begun to examine hospital readmission rates as a proxy for patient morbidity.

Satisfaction. Patient satisfaction is generally viewed as a multidimensional concept involving the cost, convenience, and technical and interpersonal aspects of care. Satisfaction measures are usually constructed from survey data and thus are more difficult to obtain than measures of mortality or morbidity.

No measures of quality have been generally agreed upon. Thus, in evaluating the impact of cost containment strategies on quality of care, this paper uses a number of different measures.

The Relationship Between Cost and Quality

The critical issue underlying the debate over cost and quality in health care is whether it is possible to contain costs while at the same time maintaining or improving quality. For many years it was presumed that increasing expenditures on health care would bring about improvements in quality. However, research in the hospital industry suggests that higher expenditures do not always guarantee improved quality.¹⁷⁷ In fact, some evidence suggests that improvements in quality may occur at no additional cost or even produce cost savings if providers adopt more effective and efficient strategies of care.

For example, one study examined the effect of two measures of resource utilization—length of hospital stay and number of services per day—on patient quality of care for a sample of 17 hospitals.¹⁷⁸ Quality of care was measured in terms of in-hospital mortality rates. Study results revealed that increased service intensity was associated with an improvement in the probability of patient survival, while a longer length of stay was associated with a reduced probability of survival.

Some analysts also believe that a substantial amount of waste and inefficiency can be eliminated from the health care system before quality of care is endangered. For example, if a substantial proportion of patients receive services that are not necessary or appropriate given their clinical condition, then the elimination of these services would result in cost savings without negatively affecting quality.

¹⁷⁷ Steven Fleming, "The Relationship Between the Cost and Quality of Hospital Care: A Review of the Literature," *Medical Care Review*, Winter 1990.

¹⁷⁸ W. R. Scott, et al., "Hospital Structure and Postoperative Mortality and Morbidity," *Organizational Research in Hospitals*, 1976.

A growing body of research indicates that a portion of the health care provided is inappropriate or unnecessary. This finding suggests that costs can be contained through reductions in this care without experiencing a deterioration in quality. In one study, researchers examined the appropriateness of the use of three procedures: coronary angiography, carotid endarterectomy, and upper gastrointestinal tract endoscopy.¹⁷⁹ Indications for the procedures were determined through a detailed review of medical records and then rated by panels of expert physicians. Appropriateness scores were then assigned to a random sample of the three procedures under investigation. The results of the study reveal significant levels of inappropriate use: 17 percent of cases for coronary angiography, 32 percent for carotid endarterectomy, and 17 percent for upper gastrointestinal tract endoscopy.

Still other analysts suggest that some cost containment strategies may reduce the quality of care received. Reimbursement limits, increased patient cost sharing and restrictions in benefits may not only eliminate waste and inefficiency but care that is of value. This paper examines the research on the relationship between quality and cost containment.

The Impact of Cost Containment Strategies on Health Care Quality

The remainder of this section provides an overview of two major health care cost containment strategies—provider payment incentives and consumer

¹⁷⁹ Mark Chassin, et al., "Does Inappropriate Use Explain Geographic Variation in the Use of Health Care Services?" *The Journal of the American Medical Association*, November 13, 1987.

behavior incentives—and reviews the evidence regarding their impact on quality of care.

Incentives to Influence Provider Behavior

A common cost containment strategy is to attempt to influence provider behavior through financial incentives. A number of reimbursement mechanisms have been adopted which constrain provider reimbursement in order to promote more judicious resource use. Physicians have been subject to capitation under a number of managed care arrangements whereby they are financially at risk if their costs exceed the capitation rate. Recently, fee schedules have been developed to reimburse physicians. Under this arrangement, a physician receives a fixed fee for performing a service regardless of the costs incurred. In addition, utilization review requirements encourage physicians to perform fewer services. Hospitals face constrained reimbursement in two ways: (1) the use of prospective payment systems to set prices for specific procedures and (2) the use of negotiated rates and provider discounts.

The quality implications of each of these reimbursement incentives have not been examined. Instead, most of the research on quality of care and cost containment has focused on the effect of capitation and prospective payment systems. This section discusses the relationship between cost containment and quality of care under capitation and prospective payment systems.

Capitation. Capitation is a reimbursement arrangement whereby providers receive a fixed payment amount to treat an individual for a scheduled period of time, usually 1 year. The provider is at financial risk to the extent that the cost of treating the individual exceeds the fixed payment amount. Capitation thus creates a strong financial incentive on the part of the provider to

conserve resources. It contrasts sharply with traditional forms of provider payment where reimbursement is linked to service utilization. That is, the provider receives payment based on the number of services provided.

Overview. Health Maintenance Organizations (HMOs) are the most common form of delivery system which use capitation as a reimbursement approach. In a typical HMO setting, enrollees pay a fixed amount for comprehensive health care services. HMOs receive no reimbursement beyond this payment amount and thus operate on a fixed budget. Because HMOs receive no reimbursement beyond the fixed payment amount, they have a financial incentive to use health care resources efficiently. A full description of HMOs is provided in the paper entitled "Managed Care as a Cost Containment Vehicle."

The financial incentives inherent in capitated arrangements have the potential to promote or compromise health care quality. Improvements in health outcomes can result if providers are more selective in their use of diagnostic and therapeutic modalities, thus reducing a patient's risk of iatrogenic injury. In addition, capitated arrangements may also encourage providers to promote the use of preventive and primary care since maintaining a patient's health will reduce utilization in the long run. Alternatively, fixed budgets can lead to undertreatment and poor quality of care if providers substitute inexpensive services for expensive ones even in situations where such a substitution may be harmful to the patient.

Impact of Capitation on Quality of Care. Several studies have analyzed the relationship between capitation and quality of care. Most of these studies have focused on the difference in quality of care in HMOs compared to fee-for-service arrangements. The Rand Health Insurance Experiment (RHIE) is

perhaps the most well known study in this area.¹⁸⁰ The RHIE is a social experiment designed to study the effects of different health insurance arrangements on the use of health services and health status. Individuals participating in the study were randomly assigned to one of several health insurance plans, including fee-for-service with and without coinsurance and HMO care.

The RHIE compared HMO and fee-for-service participants on a wide range of health status indicators, including risk of death. Adjustments were made for the health status of participants before they joined the study. Study results revealed few differences in health status between HMO and fee-for-service participants, although the evidence indicated that HMO participants who were sick and poor before joining the HMO did worse than their fee-for-service counterparts on several health status indicators.

Several other studies have compared the process and outcomes of care between HMO and fee-for-service participants regarding a specific diagnosis or condition. In general, these studies have not found differences in medical care quality between HMO and fee-for-service patients. For example, one study which focused on the treatment of rheumatoid arthritis found that patients in HMOs had about the same number and types of hospitalization and the same rate of surgery as fee-for-service patients.¹⁸¹

Perceptual data from physicians also suggest that quality of care is comparable under capitated and fee-for-service plans. In a case study of a community undergoing significant and rapid HMO development, local

¹⁸⁰ John Ware, et al., "A Comparison of Health Outcomes at a Health Maintenance Organization Versus Those of Fee-For-Service Care," *The Lancet*, May 3, 1986.

¹⁸¹ E. Yelsin, et al., "A Comparison of the Treatment of Rheumatoid Arthritis in Health Maintenance Organizations and Fee-for-service Practice," April 11, 1985.

physicians were surveyed to learn about their views regarding the impact of HMO development on the community's medical care quality.¹⁸² Of the 850 physicians responding to the survey, 80 percent reported that the presence of HMOs had not resulted in a decline in the community's medical care quality. No significant differences in opinion were observed between physicians who did and did not experience a decline in their income subsequent to the development of the HMOs; however, physicians who did not work in an HMO were more likely than physicians who did to report that quality had declined.

The Medicare HMO demonstrations provide a great deal of additional data regarding capitated arrangements. These demonstrations were initiated by the Federal Government in the early 1980s in order to explore the potential of HMOs as a health care delivery system for Medicare beneficiaries. Evaluation studies were conducted to examine the medical care outcomes of HMO care as well as beneficiary satisfaction with the care they received.

Results indicated that Medicare beneficiaries who chose to enroll in HMOs received more thorough and complete care for several diagnostic conditions than did their counterparts who received care in fee-for-service settings. However, no differences were observed between HMO and fee-for-service beneficiaries with respect to objective measures of health care outcomes such as mortality and hospital readmission rates.¹⁸³

As for satisfaction of care, HMO beneficiaries reported relatively greater satisfaction with office waiting times and relatively less satisfaction with their

¹⁸² Robert Schultz, et al., "Physician Adaptation to Health Maintenance Organizations and Implications for Management," *Health Services Research*, April 1990.

¹⁸³ K. Langwell and J. Hadley, "Evaluation of the Medicare Competition Demonstrations," *Health Care Financing Review*, Winter 1989.

physician's technical quality of care. Thus, HMO beneficiaries perceived the quality of their care to be lower than what would have been inferred from objective indicators.¹⁸⁴ This lack of congruence between subjective and objective measures among HMO beneficiaries is an important and currently unexplored issue.

The existing research on capitation suggests that this form of cost containment strategy does not pose a threat to medical care quality. However, existing research has not distinguished between the independent effect of capitation from other HMO characteristics that might be related to quality. For example, most HMOs use various utilization management techniques, including case management, second surgical opinion requirements, and preadmission screening. These techniques, to the extent that they are used to arrange for the most appropriate care available to patients, may play a critical role in HMO quality of care. Although several States are currently experimenting with capitated arrangements to reimburse providers who care for Medicaid beneficiaries, there is little research on the impact of these arrangements on quality of care.

Prospective Payment. The use of prospective payment policies to reimburse hospital providers is an important and widely implemented cost control strategy in the U.S. Prospective payment policies reimburse providers a fixed amount for a specific product, such as the care of a patient with a particular diagnosis or the provision of a specific procedure. This section presents the evidence on the impact of prospective payment on quality of care.

¹⁸⁴ *Ibid.*

Overview. The most well-known example of prospective reimbursement is the Federal Government's Prospective Payment System (PPS) for Medicare beneficiaries. Prior to 1983, hospitals received payment on a cost basis for all services provided to Medicare beneficiaries. However, under PPS hospitals have been paid an amount based largely on flat rates per admission calculated for each of approximately 470-diagnosis related groups. PPS imposes a fixed budget on hospitals for the care of Medicare beneficiaries and thus gives them a financial incentive to conserve resources.

The financial incentives inherent in prospective payment policies are similar to those of capitation, and thus have the potential to both improve and compromise medical care quality. PPS, for example, could promote more judicious use of health care resources and thus improve quality. However, because PPS contains incentives to decrease length of stay and substitute lower-cost services and procedures, there has been much concern that quality will decline. Existing research on the effect of PPS on medical care quality is limited at this time, but the literature is likely to grow in the next few years. Two completed studies are discussed below.

Impact of PPS on Quality of Care. The existing research on PPS suggests that this payment scheme, despite encouraging shorter hospital stays, has not caused a decline or improvement in the quality of hospital care that Medicare beneficiaries receive. One study compared patient outcomes before and after the implementation of PPS in a nationally representative study of 14,012 Medicare patients hospitalized in 1981-82 and 1985-86 with one of five diseases: congestive heart failure, acute myocardial infarction, pneumonia,

cerebrovascular accident, and hip fracture.¹⁸⁵ Measures examined in the study included length of stay, mortality, discharge destination, and readmissions. For the five diseases combined, there was roughly a 24 percent decline in length of stay in the post-PPS period. Inpatient mortality also declined (between 12.1 percent and 16.6 percent depending on the condition) in the post-PPS period. Differences between the two periods in 30- or 180-day post-admission mortality, however, were less than 2 percent (in favor of the post-PPS period). An additional finding was that of those patients who were admitted to the hospital from home, 4 percent more patients were not discharged home during the post-PPS period than during the pre-PPS period.

In another study of the effect of PPS on hospital care, researchers examined length of stay and readmission rates for all Medicare patients discharged from Massachusetts hospitals between 1982 and 1986.¹⁸⁶ Study results showed that PPS played a role in decreasing length of stay but had no effect on readmission rates.

The observed decline in inpatient mortality in the post-PPS period is likely due to the relatively faster discharge of sick patients to nursing homes. The available data, however, extends as far as 1986 only. PPS payment rates have been adjusted downward since the 1983-87 period. Additional research will be needed in the future to inform policy makers about the effects of PPS on quality in era of tighter reimbursement and greater emphasis on outpatient care.

¹⁸⁵ K. L. Kahn, et al., "Comparing Outcomes of Care Before and After Implementation of the DRG-Based Prospective Payment System," *The Journal of the American Medical Association*, October 17, 1990.

¹⁸⁶ Arnold Epstein, et al., "Trends in Length of Stay and Rates of Readmission in Massachusetts: Implications for Monitoring Quality of Care," *Inquiry*, Spring 1991.

Incentives to Influence Consumer Behavior

A number of incentives have been established to influence the amount and type of health care services consumers use. These include greater cost-sharing to encourage consumers to use fewer services, utilization review requirements to reduce unnecessary care, and changes in the mix of benefits to encourage consumers to use preventive and primary care services. Other incentives have been established to promote wellness and to alter behavior and lifestyle habits which adversely affect health status. Research on consumer incentives has focused on the impact of increased cost-sharing arrangements and benefit changes.

Overview of Consumer Cost-Sharing Arrangements and Benefit

Changes. Increased consumer cost-sharing is another strategy for controlling costs. This strategy is being followed by many employers who are finding it increasingly expensive to provide health insurance to their employees. Consequently, a growing number of employees are paying more for their health care through higher deductibles and copayments. In addition, a number of public and private insurance plans have been changing the mix of benefits to control costs.

Cost-sharing and benefit changes are strategies that can be used to constrain individuals from purchasing care that will yield little or no therapeutic benefit. Cost-sharing requirements force the individual to consider the marginal cost of the care in relation to its marginal benefit. Opponents of cost-sharing argue that if people are required to pay out-of-pocket they will forego necessary care, particularly routine primary and preventive care. Similarly, benefit reductions create a disincentive to use certain services since they are no longer covered by insurance. Thus, unlike capitation and PPS that present potential risks to quality based on provider responses to financial

incentives to conserve resources, the risks posed by cost-sharing and benefit changes relate to the consumers' response to financial disincentives to obtain care.

Impact of Cost-Sharing and Benefit Changes on Quality of Care. The evidence on the relationship between cost-sharing and benefit changes on consumer health status is sparse. Much of what we know comes from the Rand Health Insurance Experiment.¹⁸⁷ Comparisons were performed on several health-status measures between study participants who were assigned to a health insurance plan that provided free care and those who were assigned to plans that required different levels of cost sharing. Although study results showed that the more participants paid for their care, the less they used, for the average participant, free care had no effect on the majority of health-status measures. However, there were two notable exceptions: (1) free care resulted in lowering blood pressure compared to persons with some level of coinsurance, and (2) adults with impaired vision at point of entry into the program were reported to have improved corrected vision. Both results were stronger among low-income participants. The failure to find differences in the other events may be due to the limited power of the design to detect differences between infrequent events.

A National Center for Health Services Research study found that charging members of prepaid group health plans a small copayment for office visits may significantly reduce the use of primary care services. The study found that office visits to primary care physicians at clinics operated by a Seattle-based health maintenance organization fell 11 percent after the plan began

¹⁸⁷ Robert Brook, et al., "Does Free Care Make a Difference?" *The New England Journal of Medicine*.

charging members a \$5 copayment fee.¹⁸⁸ Whether this reduction in office visits represents reduced access or a reduction in inappropriate visits is unclear, since the study did not examine the impact of reduced utilization on health status.

A recent study found that a reduction in coverage for prescription drugs under the New Hampshire Medicaid program increased hospitalizations and admissions to nursing homes.¹⁸⁹ The introduction of a three-drug reimbursement limit in New Hampshire led to a reduction in the use of medications and a near doubling of the rate of nursing home admissions among chronically ill elderly patients.

¹⁸⁸ D. C. Cherkin, L. Grothaus, and E. Wagner, "The Effect of Office Visit Copayments on Utilization in a Health Maintenance Organization," *Medical Care*, July 1989.

¹⁸⁹ Stephen B. Soumerai, et al., "Effects of Medicaid Drug-Payment Limits on Admissions to Hospitals and Nursing Homes," *The New England Journal of Medicine*, October 10, 1991.

Part Three: Health Care Delivery in Other Countries



HEALTH CARE DELIVERY IN OTHER COUNTRIES

The magnitude and scope of problems with the United States health care system has led policy makers and consumers alike to examine the delivery systems of other countries. Even at first glance, national health care systems like those of Canada, the United Kingdom, and Germany appear to be more cost-effective than our own. Table 1 presents 1989 per capita health care expenditures in U.S. dollars and as a percentage of Gross Domestic Product (GDP) for 10 Organization for Economic Cooperation and Development (OECD) countries.

Currently, there are two published data bases—the OECD and Rubles/Schneider—that compare international health spending. The OECD figures are comprehensive but underestimate health expenditures in some countries, while the Rubles/Schneider figures exclude a few health care components in the interest of comparability. The OECD used ODP to compare health spending, while Rubles/Schneider used GNP, but that difference is not important. As a share of GNP in the OECD data base, health spending ranged from a high of 11.8 percent in the U.S. in 1989 to a low of 5.8 percent in the United Kingdom. The difference between the U.S. and the next highest country—Sweden—was 3 percentage points. Per capita expenditures ranged from a high of \$2,354 in the U.S. to a low of \$836 in the United Kingdom. As a share of GNP, Rubles/Schneider found the range in 1988 to be from a high of 10.2 percent in the U.S. to a low of 6.4 percent in the United Kingdom. The difference between the U.S. and Sweden was only 1 percentage point. Per capita spending ranged from \$2,006 in the U.S. to \$858 in the United Kingdom.

TABLE 1
HEALTH EXPENDITURES IN 10 COUNTRIES

Country	OECD Per Cap. (89)	R/S* Per Cap. (88)	OECD % of GDP (89)	R/S* % of GNP (88)
United States	\$2,354	\$2,006	11.8%	10.2%
Sweden	1,361	1,329	7.8	9.2
Canada	1,683	1,495	8.7	8.4
France	1,274	1,154	8.7	6.9
Germany	1,232	1,200	8.2	8.4
Switzerland	1,376	1,385	7.8	7.7
Austria	1,093	1,000	8.2	8.1
Italy	1,050	996	7.8	7.7
Japan	1,035	989	6.7	6.9
United Kingdom	836	858	5.8	6.4

* Rubles/Schneider

SOURCE: George J. Schieber, Jean-Pierre Poullier, and Leslie Greenwald, "Health Care Systems in Twenty-Four Countries," *Health Affairs*, Fall 1991; Dale Rubles and Markus Schneider, "International Health Spending: Comparisons With the OECD," *Health Affairs*, Fall 1991.

U.S. per capita health care expenditures, both in absolute dollars and as a percentage of GDP, are far higher than for all other comparison countries. How is it that these other countries are able to provide health care coverage to virtually all citizens at substantially lower costs? Are they doing something that we should be doing?

This paper provides an overview of the health care delivery systems of four foreign countries and examines their approaches to containing health care costs while maintaining access and quality of care. It also addresses consumer perceptions of how well the various systems are working and what difficulties there may be in transferring aspects of foreign delivery systems into the United States.

Health Care Delivery System Profiles

This section describes the structure, financing, benefits, and reimbursement mechanisms of the health care delivery systems of four countries: Canada, the United Kingdom, Germany, and France; table 2 presents a summary of key system features. While all four countries have "national" health care systems, they vary enormously in the degree of government oversight.

Canada

Of all countries with a national health care system, Canada is by far the most popular object of scrutiny and comparison in the United States. While this level of interest may be in part a reflection of its geographical and cultural proximity, it is likely also due to the relative youth of the system; although Saskatchewan has had a system for 30 years, the last Province implemented

TABLE 2
SUMMARY OF NATIONAL HEALTH CARE DELIVERY
SYSTEM FEATURES

SYSTEM FEATURE	CANADA	UNITED KINGDOM	GERMANY	FRANCE
1. Structure	Independent Provincial insurance plans operating within Federal guidelines.	Fully national system administered through the Department of Health and Social Security in conjunction with 14 Regional and 190 District Health Authorities.	Administered through 1,100 not-for-profit "sickness funds" (insurance organizations).	Administered through over 100 sickness funds which are supervised by the Ministry of Health and Social Security.
2. Financing	Shared Federal-Province financing through taxes and premiums (in two Provinces).	85 percent through general taxation; 12 percent through payroll tax; 3 percent through patient billing.	Payroll tax shared equally between employers and employees. Pension tax for retired citizens.	Payroll tax shared unequally between employer and employee. Co-insurance of 0% to 30%.

TABLE 2 (Continued)

3. Benefits	Medical and hospital services. Drugs and dental services covered for special groups only.	Medical and hospital services, dental services, and prescription drugs.	Medical and hospital services, dental services, prescription drugs, and cash benefits.	Medical and hospital services, dental services, prescription drugs, and cash benefits.
4. Reimbursement	Global budgets for operating costs. Capital expenditures controlled separately by Province.	Global budgets for operating costs. Some hospitals now operate on a "free market" basis with partial payment from the NHS.	Per diem rates for operating costs. Capital expenditures are controlled separately.	Public hospital: global budget. Private hospital: per diem rates.
Hospital		Hospital-based physician: salaried <u>Ambulatory physician:</u> combination of capitation and fee schedule.	Hospital-based physician: salaried <u>Ambulatory physician:</u> fee schedule.	Hospital-based physician: salaried <u>Ambulatory physician:</u> fee schedule.
Physician	Provincewide fee schedule.			

its system only 19 years ago.¹⁹⁰ Prior to that, the Canadian system closely resembled that of the United States.

Structure. Canada's health care delivery system comprises independent Provincial insurance plans operating within Federal guidelines and with Federal cost-sharing. Within each of the 10 Canadian Provinces, coverage for hospital services is administered separately from coverage for physician services. The Hospital Insurance and Diagnostic Services Act of 1957 established guidelines that provided Federal subsidies for hospital services paid for by the Provinces that chose to participate. This was followed in 1966 by the Medical Care Act, which established physician insurance programs. By 1972, all Provinces had enacted both acts.

Under the two acts, the Canadian Government agreed to share approximately 50 percent of the costs of each Provincial health insurance plan that met a set of strict Federal guidelines, including that the plan be publicly administered, universally accessible to all residents, and free of financial barriers to covered services.¹⁹¹ However, by 1977, rapidly increasing health care spending led the Federal Government to modify the existing method for sharing health care costs with the Provinces. The Federal-Parliament Fiscal Arrangements and Established Programs Financing Act established a new formula under which the existing 50/50 arrangement was replaced by a system of block grants and a transfer of personal and corporate income tax points to the Provinces. This effectively capped Federal spending at the rate of growth in

¹⁹⁰ Carol Sakala, "The Development of National Medical Care Programs in the United Kingdom and Canada: Applicability to Current Conditions in the United States," *Journal of Health Politics, Policy, and Law*, Winter 1990, p. 718.

¹⁹¹ Uwe E. Reinhardt, "Health Insurance and Cost Containment Policies: The Experience Abroad," in Mancur Olson, ed., *A New Approach to the Economics of Health Care* (American Enterprise Institute for Public Policy Research: Washington, DC, 1981), p. 153.

Canadian GDP, leaving the Provinces to absorb a greater share of health care costs if spending increased at a faster rate than the general economy.¹⁹²

The national system is supplemented by a limited private insurance market. Private insurers are prohibited from offering benefits financed through the Provincial plans and are limited to services such as private and semi-private rooms, long-term care, adult dental care, and various types of prescription drugs.¹⁹³ Approximately 90 percent of Canadians have supplemental insurance coverage.¹⁹⁴

Financing. The Federal share of Canadian health care spending is financed by a progressive income tax, and the Provinces may use any method they choose to finance their share. Most Provinces use general tax revenues, but Alberta and British Columbia also charge health insurance premiums.¹⁹⁵ Those individuals who are unable to pay are eligible for full or partial assistance from the Province, and residents 65 or older do not pay premiums.

Benefits. All medical and hospital services are covered under the national system. This includes physicians' services at home, in the office, and in the hospital or other eligible facilities. Covered services include diagnosis and treatment of illness and injury, prenatal and postnatal obstetrical care, laboratory services, and clinical pathology services. Inpatient and outpatient hospital services include ward accommodations, nursing services, laboratory and radiology diagnostic procedures, inpatient drugs, the use of operating and

¹⁹² John K. Iglehart, "Canada's Health Care System (First of Three Parts)", *The New England Journal of Medicine*, July 17, 1986, p. 207.

¹⁹³ *Ibid.*

¹⁹⁴ Harvard Community Health Plan, *1990 Annual Report*, p. 10.

¹⁹⁵ Congressional Budget Office, *Rising Health Care Costs: Causes, Implications and Strategies*, U.S. Government Printing Office, Washington, DC, April 1991, p. 83.

delivery rooms and radiology facilities, anesthetic and surgical supplies, home renal dialysis equipment, home hyperalimentation equipment, and dental surgery.¹⁹⁶ Routine adult dental care and prescription drugs are covered for certain special groups only.

Reimbursement. Hospitals are reimbursed via global budgets which are approved prospectively by each Province's Ministry of Health. These budgets cover operating expenses only; capital costs are controlled separately and must be approved by the Ministry of Health. The process for obtaining additional funds for new capital acquisitions effectively bars the use of private capital markets and suppresses the acquisition of new, expensive medical technology. In turn, this results in long waits for certain diagnostic tests and surgical procedures. For example, Newfoundland, with over half a million inhabitants, has one functioning CAT-scanner team, resulting in a 2-month wait.¹⁹⁷

Physicians are reimbursed on a fee-for-service basis under Province-wide, negotiated fee schedules. Negotiations include representatives of the Provincial medical association and a delegation from the Provincial insurance plan. Fees are updated on an aggregate basis, and the medical association then decides how the increase will be divided among the various medical specialties. Updating physician fee schedules has been one of the most contentious aspects of the Canadian health care system, especially since the passage of the 1984 Canada Health Act, which prohibited balance billing to patients and eliminated an additional (albeit limited) source of physician income.

¹⁹⁶ John K. Iglehart, "Canada's Health Care System (Second of Three Parts)," *The New England Journal of Medicine*, Sept. 18, 1986, p. 780.

¹⁹⁷ Michael A. Walker, "From Canada: A Different Viewpoint," *Healthcare Management Quarterly*, First Quarter 1989, p. 12.

The United Kingdom

The British National Health Service (NHS), which provides health care coverage for the citizens of England and Wales, grew out of a number of key events, the first being the establishment of the National Health Insurance Act of 1911. This act provided limited medical insurance for manual workers and was in part a response to the poor health status of Boer War recruits at the turn of the century.¹⁹⁸ A second major milestone in the creation of the NHS was the commission and completion of the 1942 Beveridge Report on national welfare policy, which asserted that health care should be "a comprehensive public service available to all and free of cost at the point of consumption."¹⁹⁹ The result was the NHS Act of 1946, which was implemented 2 years later.

Structure. The NHS is overseen by the Department of Health and Social Security (DHSS) but is directed in conjunction with regional and district authorities that control all health care resources (except for a few private hospitals). This structure, which was put in place in 1974, replaces the original "tripartite" structure which administered hospital, primary care, and community services separately.

Under the current system, there are 14 Regional Health Authorities (RHAs) which report to the Secretary of State. The RHAs coordinate the plans and supervise the efforts of 190 smaller District Health Authorities (DHAs),

¹⁹⁸ Carol Sakala, "The Development of National Medical Care Programs in the United Kingdom and Canada: Applicability to Current Conditions in the United States," *Journal of Health Politics, Policy and Law*, Winter 1990, p. 714.

¹⁹⁹ Paul J. Godt, "Confrontation, Consent, and Corporatism: State Strategies and the Medical Profession in France, Great Britain, and West Germany," *Journal of Health Politics, Policy and Law*, Fall 1987, p. 464.

which are responsible for implementing the NHS, including health needs assessment and facility administration. They also are responsible for submitting plans and budgets to the RHAs, which in turn transfer the information to the Secretary of State for financial and other considerations.²⁰⁰

The NHS is currently undergoing some significant changes as a result of the adoption of a 1989 White Paper on health care reform. Among the changes are an increase in the managerial and budgetary authority of the DHAs and a move to allow approximately 16 percent of hospitals to "opt out" of the NHS and operate primarily on a free-market basis, with only partial NHS payment for operating costs.²⁰¹ Another reform item is to provide large general practices (i.e., those with more than 11,000 patients) with a fixed budget to buy specialist hospital services for their patients.²⁰²

As in Canada, the British national system is supplemented by a private insurance market for services such as elective surgeries, private hospital rooms, and avoidance of long waiting lists. Approximately 9 percent of the population purchases supplemental coverage, although 17 percent of all elective surgery takes place in the private sector. The private sector contains almost all available nursing home beds.²⁰³ The number of people covered under private insurance has grown over the last few years mainly because it is increasingly being provided by companies for their employees.

²⁰⁰ American Medical Association, *The British Health Care System*, 1976, p. 3.

²⁰¹ As of April 1991, only 56 hospitals had opted out. See Patricia Day and Rudolf Klein, "Britain's Health Care Experiment," *Health Affairs*, Fall 1991, p. 52.

²⁰² "Proposed Changes in Britain's Health Service Stir Varied Reactions, Widespread Controversy," *Journal of the American Medical Association*, April 21, 1989, p. 2174.

²⁰³ Harvard Community Health Plan, *1990 Annual Report*, p. 14.

Financing. The NHS is financed primarily (85 percent) through general taxation. Payroll taxes fund approximately 12 percent of the NHS, and patients pay the remaining 3 percent of costs.²⁰⁴

NHS expenditure levels are set prospectively by Parliament each year. Both historical expenditure data and financial and demographic estimates from the DHAs are used to set the budget. The DHAs are becoming increasingly important in this process given the changes proposed in 1989.

To a greater degree than any of the other countries studied here, the availability of health care resources in Britain is directly affected by the financial needs of the other British ministerial departments. However, public financing is supplemented to some degree by the current private insurance market.

Benefits. The NHS covers all primary care, acute and long-term hospital care, dental and paramedical services, and prescription drugs. Prescriptions require a minimum copayment, which was established more to deter utilization than to raise revenues.²⁰⁵ Recent changes have increased the availability of preventive care benefits, including immunizations, vaccinations, and screening visits.

Although benefits are generous, there appear to be significant opportunity costs—namely, waiting lists, limited choice of general practitioners, and virtually no access to specialist or hospital care without approval from the general practitioner.²⁰⁶

²⁰⁴ Congressional Budget Office, *Rising Health Care Costs: Implications and Strategies*, U.S. Government Printing Office, Washington, DC, April 1991, p. 83.

²⁰⁵ Paul J. Godt, "Confrontation, Consent, and Corporatism: State Strategies and the Medical Profession in France, Great Britain, and West Germany," *Journal of Health Politics, Policy, and Law*, Fall 1987, p. 465.

²⁰⁶ American Medical Association, *The British Health Care System*, 1976, p. 126.

Reimbursement. Hospitals are reimbursed based on a prospective, hospital-specific global budget. As mentioned above, a small number of hospitals are now operating on a "free market" basis, with only partial payment from the NHS.

Physician reimbursement varies depending on whether the physician is hospital-based or ambulatory and whether he or she is a "consultant." Hospital-based physicians are paid a salary which is included in the hospital's operating budget. Those who have "consultant" status are permitted by the NHS to have limited private practices on the side, where they see privately insured patients. Ambulatory physicians (i.e., general practitioners) are reimbursed through a combination of capitation and negotiated and binding fees.

Germany

The health care delivery system described here is in effect that of what was formerly West Germany; while some experts have speculated on the unification's impact on health care delivery, the general consensus is that the "unified" system is likely to closely resemble that of West Germany.²⁰⁷

The German health care system is similar to those of Canada and England in its comprehensiveness (90 percent of Germans are covered for a wide range of benefits) but is radically different in its structure. The German system is highly decentralized and independent of government oversight.²⁰⁸

²⁰⁷ Deborah A. Stone, "German Unification: East Meets West in the Doctor's Office," *Journal of Health Politics, Policy, and Law*, Summer 1991, pp. 401-12.

²⁰⁸ Christa Altenstetter, "An End to a Consensus on Health Care in the Federal Republic of Germany?" *Journal of Health Politics, Policy, and Law*, Fall 1987, p. 509.

Structure. The system is administered through approximately 1,100 not-for-profit insurance organizations known as "sickness funds" (*Krankenkassen*). There are two major types of sickness funds: "local" funds, whose members come from a particular geographic area and tend to be blue-collar workers, and "substitute" funds, whose members are occupationally related and tend to be white-collar workers.

Enrollment in a sickness fund is mandatory below a certain annual income level (about \$36,600 in 1990) and for certain occupational classifications. Individuals above the baseline income level have the option to purchase private insurance instead. However, once a resident opts out of the national system, he or she may not rejoin. Approximately 8 percent of Germans opt for private insurance; the remaining 1 to 2 percent of the population is uninsured.²⁰⁹

Financing. The sickness funds collect a payroll tax from both employers and employees. The tax, which is shared equally, is calculated as a function of both salary and wage trends in the geographic area and sickness fund historical expenditures. The tax rate is also subject to a Federal ceiling. Currently the combined contribution of employers and employees varies across sickness funds from 8 to 16 percent of a worker's salary.²¹⁰

Expenditures for retired persons are financed through a flat 6.5-percent tax on Social Security pensions and an income-based tax on private pensions. However, these premiums do not cover all the costs associated with care for the elderly. Sickness funds with a disproportionate share of elderly members

²⁰⁹ Bradford Kirkman-Liff, "Physician Payment and Cost-Containment Strategies in West Germany: Suggestions for Medicare Reform," *Journal of Health Politics, Policy, and Law*, Spring 1990, p. 73.

²¹⁰ The average contribution in 1989 was 12.8 percent. See John K. Iglehart, "Germany's Health Care System (First of Two Parts)," *The New England Journal of Medicine*, Feb. 14, 1991, p. 506.

receive supplemental contributions from a national reserve fund. Premiums for the unemployed are financed by the Federal Labor Administration and local welfare agencies.²¹¹

Benefits. The German national system provides fairly comprehensive coverage for chronic and acute illnesses and for physical, emotional, and mental disabilities. It also provides 100 percent earnings for the first 6 weeks of disability and 80 percent thereafter, including a cash payment to the survivors for funeral expenses. It covers all inpatient and outpatient diagnostic and therapeutic services that are considered medically necessary, including MRI, lithotripsy, and heart transplantation. It also covers prescription drugs (with a small copayment) and dental care. Maternity benefits are extensive, including limited assistance for reproductive health, sterilization, and abortion. The Federal Government also pays a monthly allowance to women on maternity leave until the baby is 12 months old.²¹²

In general, Germans are free to choose their own primary care physician, who can be either a general practitioner or a specialist, provided he or she is certified to practice medicine with the national system.²¹³

Reimbursement. Reimbursement is separate for ambulatory and hospital-based physicians. For the 73,000 ambulatory-based physicians, revenues collected by the sickness funds are transferred to 18 regional associations which represent and reimburse the physicians on a fee-for-service basis. Rates are established through a prospectively negotiated fee schedule. The

²¹¹ *Ibid.*, p. 506

²¹² Christa Altenstetter, "An End to a Consensus on Health Care in the Federal Republic of Germany?" *Journal of Health Politics, Policy, and Law*, Fall 1987, p. 508.

²¹³ Bradford Kirkman-Liff, "Physician Payment and Cost-Containment Strategies in West Germany: Suggestions for Medicare Reform," *Journal of Health Politics, Policy, and Law*, Spring 1990, p. 73.

fee schedule, which assigns relative values to 1,850 different service items by a point rating system, was revised in October 1987 to put more emphasis on basic, as opposed to specialized, services.²¹⁴

Hospital-based physicians are paid salaries which vary on the basis of their seniority and medical specialty. Their salaries are part of the hospital's per diem operating costs that are negotiated with the sickness funds each year.

Hospital capital costs are funded mostly from State and local government contributions, and all capital improvements are reviewed and approved via a State planning process. As with Canadian hospitals, German facilities have fewer pieces of high-tech equipment than their American counterparts, and technology tends to be highly concentrated in teaching hospitals.²¹⁵

France

While France's National Health Insurance (NHI) system resembles that of Germany's in its national network of sickness funds, it remains closely tied to the national government. According to one expert, the NHI is "arguably the most complicated" of European health care delivery systems.²¹⁶

Structure. The NHI is composed of local, primary sickness funds (*caisses primaires d'assurance maladie*) that cover virtually 100 percent of the country's population. More than 80 percent of French citizens belong to the

²¹⁴ Gerhard Brenner and Dale Rublee, "The 1987 Revision of Physician Fees in Germany," *Health Affairs*, Fall 1991, p. 149.

²¹⁵ John K. Iglehart, "Germany's Health Care System (First of Two Parts)," *The New England Journal of Medicine*, February 14, 1991, p. 508.

²¹⁶ Jeremy W. Hurst, "Reforming Health Care in Seven European Nations," *Health Affairs*, Fall 1991, p. 10.

"general fund," which is a network of over 100 local sickness funds.²¹⁷ The funds are organized geographically and supervised by the French Ministry of Health and Social Security.

The system contains both public and private not-for-profit hospitals. The private hospitals specialize in more resource-intensive and lucrative services such as surgery and obstetrical care. Private hospitals may contract with the national system to treat publicly insured patients. However, public hospitals may not receive reimbursement for services provided to patients with supplemental private health insurance.²¹⁸

Financing. The NHI system is financed via a payroll tax shared unequally between the employer and the employee; the employer pays approximately 12.5 percent of payroll and the employee pays approximately 3.5 percent of payroll.

Private insurance is available through certain employers and unions and is financed by a payroll deduction. Approximately 6 percent of total health expenditures are financed through private insurance.²¹⁹

Benefits. The NHI covers ambulatory and hospital-based care, laboratory tests, prescription drugs, dental and paramedical services, work accidents, sick days, and maternity care. Because the NHI is part of a comprehensive Social Security program, it also covers pension benefits for retired citizens.

²¹⁷ Congressional Budget Office, *Rising Health Care Costs: Causes, Implications, and Strategies*, U.S. Government Printing Office, Washington, DC, April 1991, p. 82.

²¹⁸ Gerard de Pouvoirville, "Hospital Reforms in France Under a Socialist Government," *The Milbank Quarterly*, Vol. 64, No. 3, 1986, pp. 392-413.

²¹⁹ Congressional Budget Office, *Rising Health Care Costs: Causes, Implications and Strategies*, U.S. Government Printing Office, Washington, DC, April 1991, p. 82.

Unlike the other systems described here, France imposes a co-insurance on its citizens. The average co-insurance rate is 10 percent.²²⁰

Reimbursement. Ambulatory care physicians have considerable autonomy in France in determining their reimbursement levels. While they are reimbursed a negotiated fee-for-service amount by the *caisse*, they may balance bill the patient. Approximately 25 percent of physicians, primarily specialists, balance bill.²²¹ Hospital-based physicians are salaried.

France's public and private hospitals are reimbursed differently. Public facilities are owned by the State and operated through the Health Ministry's Hospitals Division and, as of 1985, are given global budgets to cover operating expenses. The global budgets are allocated to the hospitals in monthly installments. Private hospitals and clinics are allowed to contract with public authorities to receive NHI-insured patients and are reimbursed on a per diem basis.²²²

Cost-Containment Activities

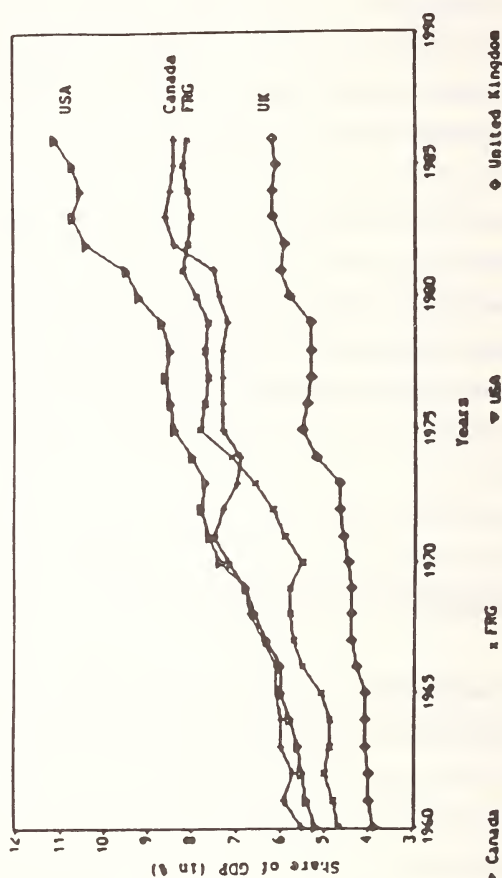
While health care spending increases have been the most dramatic in the U.S., other countries have not been immune. Both figure 1 and table 3

²²⁰ Paul J. Godt, "Confrontation, Consent, and Corporatism: State Strategies and the Medical Profession in France, Great Britain, and West Germany," *Journal of Health Politics, Policy, and Law*, Fall 1987, p. 461.

²²¹ Jeremy W. Hurst, "Reforming Health Care in Seven European Nations," *Health Affairs*, Fall 1991, p. 10.

²²² Paul J. Godt, "Confrontation, Consent, and Corporatism: State Strategies and the Medical Profession in France, Great Britain, and West Germany," *Journal of Health Politics, Policy, and Law*, Fall 1987, p. 469.

FIGURE 1
HEALTH EXPENDITURES AS A PERCENT OF GDP,
1960 - 1986, FOUR COUNTRIES



SOURCE: Martin Platt, "Differences in Health Care Spending Across Countries,"
 The Journal of Health Politics, Policy and Law, vol. 53, num. 1 (Spring 1990).

illustrate the magnitude of expenditure growth in the countries described here:

TABLE 3
HEALTH EXPENDITURES AS A PERCENTAGE OF GDP: 1970-1989
EUROPEAN COUNTRIES ONLY

COUNTRY	HEALTH EXPENDITURES AS A PERCENTAGE OF GDP			PERCENT CHANGE	
	1970	1980	1989	1970-1980	1980-1989
FRANCE	5.8%	7.6%	8.8%	31%	16%
GERMANY	5.5%	8.5%	8.2%	44%	(4%)
UNITED KINGDOM	4.5%	5.8%	5.9%	29%	2%

SOURCE: *OECD Health Systems: Facts and Trends* (Paris: Organization for Economic Cooperation and Development, forthcoming).

The growth rates for the period 1980 to 1989 are substantially lower than those for the earlier period; in fact, Germany experienced a decrease of 4 percent in health expenditures as a percentage of GDP. One hypothesis for this shift is that the dramatic increases of the 1970s led each country to adopt some combination of cost-containment strategies. This section examines the use of cost-containment mechanisms to control expenditures in the four countries described here.

Canada

The Canadian health care system contains no limits on patient demand for services, no system-wide controls on the volume of services provided by physicians and hospitals, and an implicit emphasis on providing more expensive care in the hospital, rather than the ambulatory setting.²²³ These factors, combined with the Government's unwillingness to reduce benefits or introduce patient cost-sharing, led to the sharp rise in expenditures illustrated in figure 1, and the subsequent enactment of the Canada Health Act of 1984.

Parliament's Canada Health Act limited the financial resources available for health care in two ways. First, it capped Federal expenditures to the 10 Provinces by tying Federal contributions to growth in the Canadian GDP. As previously discussed, this made the Provinces responsible for 100 percent of any increase in the rate of health care spending above the rate of increase in the GDP.

Second, the Canada Health Act of 1984 banned physician balance billing. While not a major source of revenues for Canadian physicians, the ban was nonetheless greeted with strong and vocal disapproval on the part of the physician community. Physicians went on strike in Ontario and Saskatchewan, and medical residents and interns initiated a lawsuit in British Columbia against that Province's attempt to restrict the number of physicians practicing in the Province through the issuance of billing numbers.²²⁴

These changes had a number of related effects. First, the Provinces responded to their increased financial burden by ratcheting down on

²²³ John K. Iglehart, "Canada's Health Care System (First of Three Parts)," *The New England Journal of Medicine*, July 17, 1986, p. 203.

²²⁴ *Ibid.*, p. 204.

physician fee increases and hospital operating and capital budget expenditures. Physicians, who are paid fee-for-service with no true utilization control, responded by increasing the volume of services provided to patients. This, coupled with limited hospital-based resources, led to an increase in patient queuing for many tests and procedures (including 2-month waits for Pap smears in one Province).²²⁵ The high-tech medical resources that do exist tend to be concentrated in certain facilities, which exacerbate the queuing problem.

Critics of the Canadian system conclude that cost-containment efforts such as the Canada Health Act have simply shifted costs from the Federal and Provincial Governments to the citizens in the form of opportunity costs for the long waits for many services.²²⁶ For those who can afford it, access to the U.S. health care system is often a solution to long waits.²²⁷ However, as discussed in the following section, Canadians are relatively happy with their health care system and would not trade it for any other.

The United Kingdom

Both figure 1 and table 2 illustrate the NHS's ability to maintain national expenditures at a fairly consistent level. However, the chronic problems with waiting lists for elective procedures (by the end of 1989, almost 1 million people were in the queue for some type of service),²²⁸ the elimination of many acute-care hospital beds, and the persistent, if small, increases in expenditures led to the commission of two studies: the 1983 Griffiths Report

²²⁵ Michael A. Walker, "From Canada: A Different Viewpoint," *Health Management Quarterly*, First Quarter 1989, p. 12.

²²⁶ *Ibid.*, pp. 11-14.

²²⁷ U.S. General Accounting Office, *Canadian Health Insurance: Lessons for the United States*, June 1991, p. 17.

²²⁸ Patricia Day and Rudolf Klein, "Britain's Health Care Experiment," *Health Affairs*, Fall 1991, p. 43.

and the 1989 white paper entitled "Working for Patients." The resulting reforms, primarily structural in nature, are described below.

Both studies led to a substantial improvement in the managerial strength of the NHS. The central government effectively separated the responsibility for purchasing health care services from that of providing health care services. This was accomplished by increasing the managerial and financial power behind the DHAs, which now are purchasers of services for those citizens residing in their jurisdiction. The general practitioners (GPs), on the other hand, have lost some of the complete autonomy that had characterized their profession since 1911; not only must they cede some decision-making on resource use to the DHAs, but they must also account for their utilization of public resources if requested.

The 1989 white paper also proposed the adoption of "indicative drug budgets" for individual GP practices to combat the persistent 4-percent real growth in prescription drug expenditures. In other words, GPs are now subject to a budget ceiling on prescription drugs. While the Parliament insists that GPs will be financially punished for exceeding their budgets only if there is evidence of persistent overprescribing, the physician community was opposed to this constraint on its prescribing habits.²²⁹

On the positive side, the British Government has stated that the reforms are designed to promote high-quality preventive medicine. GPs are being given bonus payments for providing certain levels of preventive care services such as vaccinations, screening exams, and immunizations. They may also

²²⁹ *Ibid.*, p. 49.

supplement their income on a fee-for-service basis by providing care in health promotion clinics.²³⁰

Germany

One of the principles underlying the financing of Germany's health care system is that employer and employee payroll contributions to the *Krankenkassen* should not rise faster than wages and salaries. The sharp increase in health care expenditures from 1970 to 1975 led the Government to enact numerous cost-containment strategies to protect this principle. The strategies tended to be bureaucratic, rather than market-driven, mechanisms. Historically, physician reimbursement has been the object of far closer scrutiny than has hospital reimbursement. In 1977, the German Government created the Concerted Action in Health Care, an advisory body which served as a forum for all related parties to meet and resolve differences. Controlling the dramatic rise in physician expenditures was a priority for the group, and its efforts led to nationally negotiated physician expenditure targets. The sickness funds paid a capitated rate into a pool for those physicians represented by the regional sickness fund physician association. The resources were then allocated to the physicians on a fee-for-service basis. Any expenditures over the target levels were carried over to the next year. Needless to say, the targets did not work well—actual expenditures consistently exceeded target expenditures. In 1986, the targets were converted to expenditure caps, and the capitation rates paid to the regional physician associations were segmented by pensioner (60 years and older)/nonpensioner status to account for perceived age-driven differences in intensity of care.

²³⁰ *Ibid.*

In 1987, physician payments were further segmented by type of service: physician consultation, laboratory testing, and all other services. In an attempt to redistribute more income to general practitioners, consultations received 46.5 to 48.5 percent of financing, laboratory testing received 10.5 percent, and other services received the remaining 41.5 to 43.5 percent.²³¹

Physicians were also subjected to greater scrutiny of their practice patterns and utilization of services. The sickness fund regional associations perform extensive physician retrospective review. Physicians whose utilization patterns differ substantially from the mean are requested to justify their statistical standing; approximately 7 to 10 percent of physicians are contacted each quarter. Only about 2 percent of cases result in retrospective payment denial.²³²

Hospitals have not been subjected to the same level of scrutiny. A 1982 law introduced incentives to reduce the number of hospital beds in the country. While this met with limited success, in 1988 Germany's average length of stay was longer, its density of acute care beds was higher, and the number of staff per bed was lower than in most Western countries.²³³

The most recent reform took place in January 1989 and increased patient cost sharing for hospital visits, dental prostheses and pharmaceutical products, and limited death and dental benefits and reimbursement for transportation costs. In particular, patients are required to pay 50 percent of the cost for dental

²³¹ Bradford Kirkman-Liff, "Physician Payment and Cost-Containment Strategies in West Germany: Suggestions for Medicare Reform," *Journal of Health Politics, Policy, and Law*, Spring 1990, p. 80.

²³² John K. Iglehart, "Germany's Health Care System (Second of Two Parts)," *The New England Journal of Medicine*, June 13, 1991, pp. 1752-1753.

²³³ *Ibid.*

services and the difference between the cost of a generic drug and the prescribed drug.²³⁴

France

Prior to 1983, public hospitals in France were reimbursed on the basis of a per diem rate which was calculated by the hospital and approved by the public health administration. There was no accompanying utilization control on inpatient length of stay and hospitals were automatically allocated end-of-the-year credits to cover any difference between actual expenses and the per diem rate. This open-ended reimbursement system led to dramatic increases in hospital operating costs and a decline in resources available for capital improvements, including the purchase of new medical technology.

In 1983, the French Government moved to global public hospital operating budgets. The global budget is a block appropriation made at the beginning of the fiscal year and is provided to the hospital in the form of monthly installments. No supplemental allocations are made, and deficits are not automatically covered in the following year's budget.

At about the same time, the Government decided to import DRGs from the American Medicare system, although more for reporting and analytical purposes than for reimbursement. A third reform restructured the existing medical education system to stem the rising number of new physicians and increase the equity of physician training and income.²³⁵

²³⁴ Germany has the highest per capita drug expenditure of any OECD country—\$258. See George J. Schieber, Jean-Pierre Poullier, and Leslie Greenwald, "Health Care Systems in Twenty-Four Countries," *Health Affairs*, Fall 1991, p. 33.

²³⁵ Gerard de Pouvourville, "Hospital Reforms in France Under a Socialist Government," *The Milbank Quarterly*, Vol. 64, No. 3, 1986, pp. 392-413.

A major limitation to the success of these reforms is the presence of a strong private sector health care market in France. For example, private hospitals were not subject to the move to global budgeting and are still reimbursed on a per diem basis. Needless to say, their rate of growth in expenditures is greater than that of the public sector hospitals.²³⁶

There have been limited attempts to control physician expenditures in France. Fee schedule increases for ambulatory care physicians are approved by the Government, but there is no similar control over the fee-for-service reimbursement system used for private hospital-based physicians.²³⁷

Perceived Consumer Satisfaction

Although each country's health care delivery system has fundamental limitations which affect its citizens' ability to obtain health care services in the most timely, cost-effective, and convenient manner, most citizens are relatively satisfied with the way their system is run. Two polls performed by the Harvard School of Public Health and Louis Harris and Associates in 1988 and 1990 attempted to measure patient satisfaction in a number of countries, including Canada, the United Kingdom, Germany, France, and the United States. The major findings are described here.²³⁸

²³⁶ Jeremy W. Hurst, "Reforming Health Care in Seven European Nations," *Health Affairs*, Fall 1991, p. 17.

²³⁷ Congressional Budget Office, *Rising Health Care Costs: Causes Implications and Strategies*, U.S. Government Printing Office, Washington, DC, April 1991, p. 87.

²³⁸ All findings in this section are from three sources: Robert J. Blendon, "Three Systems: A Comparative Survey," *Health Management Quarterly*, First Quarter 1989, pp. 2-10; Robert J. Blendon, et al., "Satisfaction With Health Systems in Ten Nations," *Health Affairs*, Summer 1990, pp. 185-192; and the Harvard Community Health Plan, *Annual Report*, 1990.

Canada

Of all the countries polled, the citizens of Canada are the most satisfied with their current health care delivery system. The majority (56 percent) of Canadians believe that their system works "pretty well" and only needs minor changes. When asked whether they would trade their health care system for that of another country, 91 percent of Canadians said they would prefer their own system to the British NHS, and 95 percent said they would prefer their own to that of the United States.

The majority (over 50 percent) of Canadians are also "very satisfied" with the quality of care provided, the level of out-of-pocket expenses, and even waiting times. However, only 42 percent stated they were very satisfied with the level of technology available in Canada, and less than one-third (32 percent) were satisfied with accessibility to elective surgery.

The United Kingdom

Satisfaction levels are significantly lower in Great Britain; 69 percent of British respondents feel that their health care system requires fundamental changes or complete rebuilding. A common consensus is that national spending, particularly on hospitalization, medical technology, and treatment of the terminally ill, is too low. However, when asked if they would prefer the American system, 80 percent said no.

The British highly value the concepts of quality of care and equality of treatment, but an overwhelming majority are dissatisfied with the current status of these health care system features. There is also a low level of satisfaction with access to elective surgery (23 percent), out-of-pocket

expenses (22 percent), access to technology (30 percent), and waiting times (41 percent).

Germany

While less critical than their British counterparts, German citizens voice dissatisfaction with particular aspects of their health care system. Less than 25 percent of the Germans surveyed are very satisfied with the current access to elective surgery and the level of out-of-pocket expenses. And well under a majority are very satisfied with waiting times (36 percent), the quality of care provided (34 percent), and access to medical technology (27 percent).

France

Forty-one percent of the French citizens surveyed felt that their health care system needed only minor changes; only 10 percent felt that the system has so much wrong with it that it requires complete rebuilding.

The United States

Americans are significantly less happy with the overall health care system (89 percent think the system requires fundamental changes or complete rebuilding). However, the majority of Americans surveyed are very satisfied with the system features that their German, British, and Canadian counterparts find so distressing—namely, access to technology, quality of care provided, and access to elective surgery.

Americans did not express high levels of satisfaction with the level of out-of-pocket expenses (only 45 percent were very satisfied) and equality of treatment (38 percent), and over 70 percent believe the level of spending on

hospitalization (79 percent) and physician services (72 percent) is too high. Fully one-third think too much is spent on the treatment of terminally ill patients.

Issues Affecting Transferability

The data presented in the last section imply that Americans are ready for a major change in how health care delivery is organized and financed in the United States. But there are certain values and forces which would undoubtedly affect our ability to readily adopt a national health care system. The final section of this paper discusses four of these factors: the value of medical technology, the value of access to care, the degree of physician autonomy, and the role of pluralism in the health care industry.

Medical Technology

American medicine makes greater use of high technology than any other country studied. In 1987, the United States had 7.4 times as many MRI units per million people as did Canada and 4.4 times as many open heart surgery units and 2.8 times as many lithotripsy units as did Germany.²³⁹ The use of high technology diagnostics and therapies increases the intensity of care for many patients but decreases the amount of time they must spend in the hospital. According to the survey results cited in Section III, Americans are pleased with this outcome.

²³⁹ Bengt Jonsson, "What Can Americans Learn from Europeans?" *Health Care Financing Review*, 1989 Annual Supplement, p. 89.

The rapid introduction of new medical technologies in the United States is a major factor in the high rate of growth in health expenditures. American providers and patients alike fear that a national health care system would introduce stringent controls on the financial resources available for the development and purchase of high technology. According to one expert, "It may be that the dynamics of U.S. society and its health care system are not compatible with the egalitarian principles underlying [a national] health care system."²⁴⁰

Access to Care

Access to care in the United States is bimodal in character: 33 million Americans have no insurance and very limited access to even basic health care services,²⁴¹ while the majority of the insured population has access to even the most sophisticated and expensive medical technology if it is deemed "medically necessary." Determining the impact of a national health care delivery system on access to care depends on where one stands in relation to these two subgroups. For the uninsured (and the underinsured, to a certain degree), a national health care system like that of Canada, France, Germany or the United Kingdom would assure access to basic health care services that they are not now receiving.

For those Americans with adequate levels of coverage, a national health care system could result in a decrease in access to certain services, particularly high-cost or elective procedures and services. These are the features with which citizens under one of the national health care delivery systems studied here are least satisfied.

²⁴⁰ Dale A. Rublee, "Medical Technology in Canada, Germany, and the United States," *Health Affairs*, Fall 1989, p. 181.

²⁴¹ Estimated from the Lewin/ICF Health Benefits Simulation Model.

There is also evidence of decreased access to more commonplace services in some national health care systems. For example, hospital global budgeting provides an incentive to favor the admission of low-cost, long-term patients. In Canada, such patients, known as "bed-blockers," prevent physicians from using acute care beds to treat short-term patients. The Ontario Ministry of Health estimates that bed-blockers occupy approximately 15 percent of beds in that Province.²⁴²

Furthermore, the continuity of care may be compromised under some of these systems by the fragmentation of the delivery of health care services. As described in section I, hospital and ambulatory care services are provided by separate groups of physicians in the United Kingdom, Germany, and France and there is little or no overlap in the settings in which each group is authorized to practice. This can lead to duplication of services and less opportunity for communication between a patient's ambulatory-based primary care physician and his or her hospital-based specialists. This is a foreign concept in the United States, where physicians move between the inpatient and outpatient setting as needed.

Physician Distribution and Autonomy

In many ways, American physicians have less professional autonomy than their foreign counterparts. They are subjected to the scrutiny of hundreds of utilization review firms and thousands of insurance companies; they struggle with the administrative requirements associated with receiving reimbursement through a wide variety of organized delivery systems; and they suffer the skepticism of a nation frustrated with persistent growth in health care

²⁴² U.S. General Accounting Office, *Canadian Health Insurance: Lessons for the United States*, June 1991, p. 45.

expenditures. Would they be relieved if we moved to a national health care delivery system? Some physicians would prefer a national health care system, but the majority would not.

However, this conclusion has less to do with professional autonomy than with financial status. American physicians earn more relative to average compensation per worker than do physicians of any other OECD country for which data are available. Fees charged by U.S. physicians for common procedures are substantially higher than in other countries. For example, average fees for appendectomies, cholecystectomies and hysterectomies were approximately 8 times the average for seven European countries.²⁴³

In Canada, physician's fees have actually decreased in real dollar terms. A comparative analysis of inflation-adjusted fees showed a decrease of 18 percent between 1971 and 1985. Fees in the United States, however, increased 22 percent over the same period.²⁴⁴

Health care reforms in other countries have included tight control over fee schedule increases, limits in the supply of physicians, and more extensive retrospective physician profiling. While these strategies exist in the United States, the fragmentation of the insurance market allows most physicians to avoid tight, consistent controls over 100 percent of their patient population. This would not be the case under a national insurance system.

²⁴³ Henry Aaron, *Serious and Unstable Condition*, p. 81.

²⁴⁴ U.S. General Accounting Office, *Canadian Health Insurance: Lessons for the United States*, June 1991, p. 35.

Consumer Pluralism

A fundamental element of the American health care delivery system is the consumer's ability to choose among participating insurance or benefit plans and to choose individual providers. Typically, these plans vary in benefit design, delivery system structure, and financial contribution level and structure. This allows members to choose the plan that best addresses their health care needs. For example, an individual who values preventive care services and low out-of-pocket costs and does not value the ability to choose his or her own physician may choose a staff-model HMO, whereas an individual who has a chronic illness and values unfettered access to his or her physicians may choose a traditional indemnity plan.

Under a national health care system, these factors might be standardized. While this would likely eliminate much of the current problem with insurance market risk segmentation (not to mention the administrative costs associated with keeping track of multiple plan options), it might send a message to Americans that the Government knows better than they what their health care needs are and how they can best receive them.

American policy makers and health care consumers alike have much to learn from the national health care delivery systems of other countries. However, we should not lose sight of the fact that each system is a product not only of its structural specifications, but also of the culture in which it functions; an "American" Canadian health care system would probably look quite different from its Canadian counterpart. Therefore, if American policy makers are to seriously consider adopting certain elements of another country's national health care system, they must assess its merits within the

constraints and features of American society, not the society in which it was designed. Without this fundamental analysis, the chances of successful reform would be limited.



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